The Economist

Statehouses: red meat and greet

The dismal state of Germany's army

Property in China: rescue, repeat

Debt on the Nile

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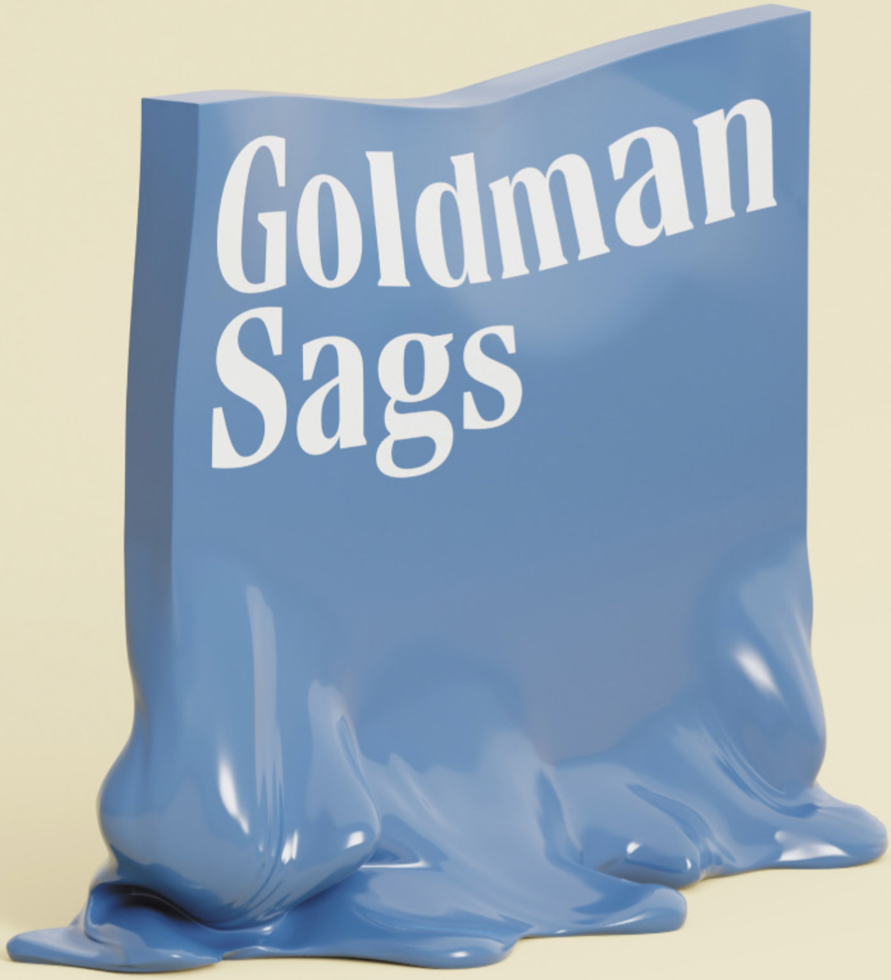

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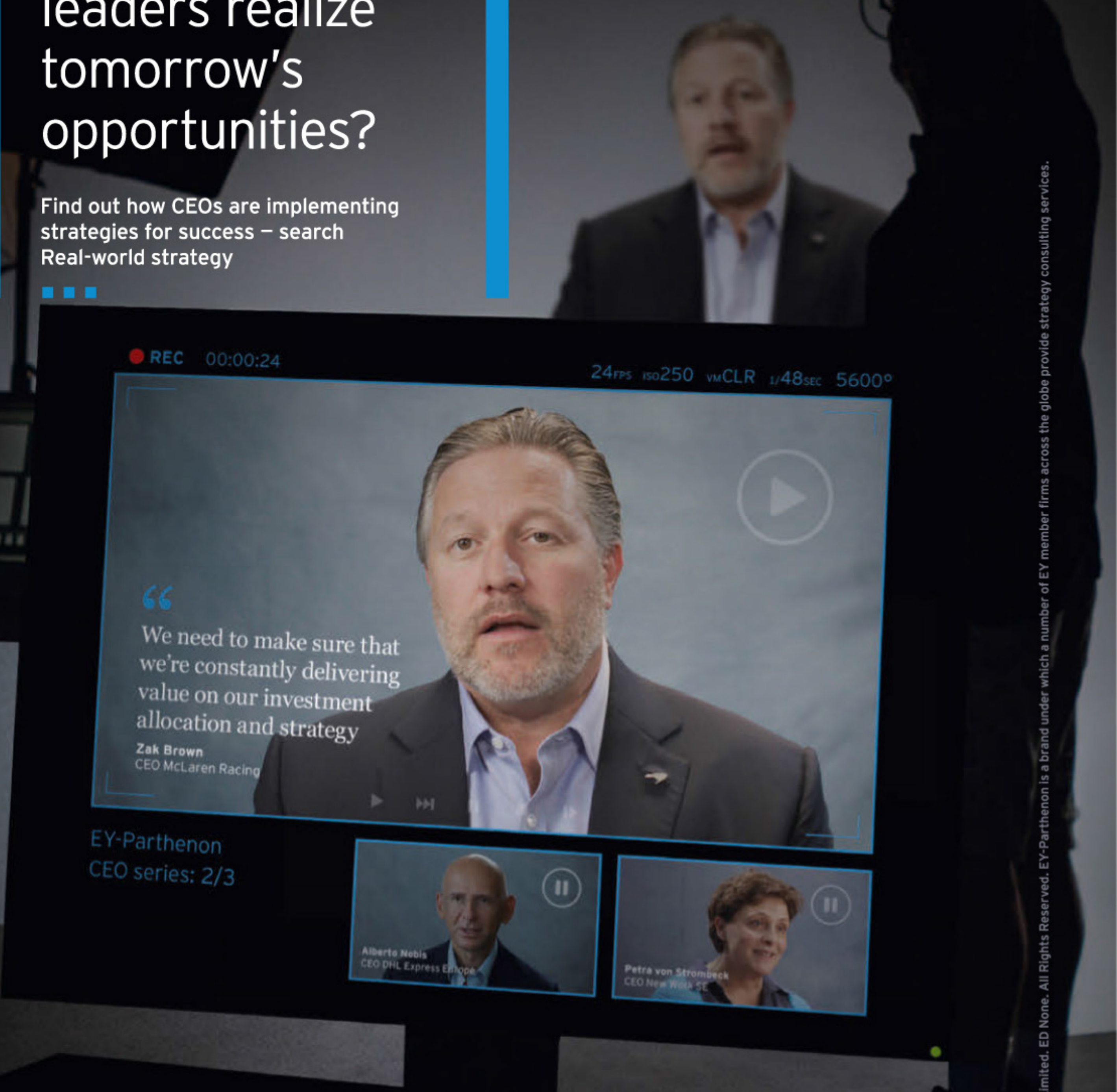
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■ ■ ■

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Sags

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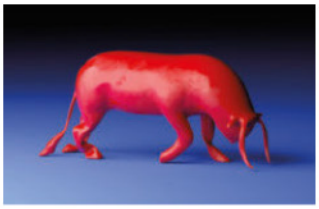

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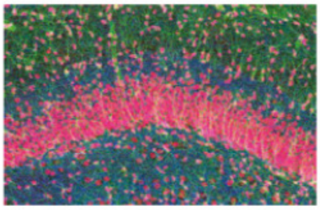

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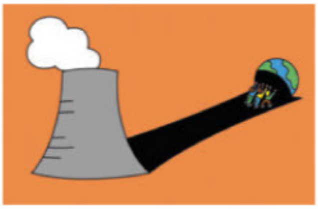

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The Economist
Volume 446 Number 9331

Published since September 1843
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The world this week Politics

After months of debate, **Ukraine** is to be sent tanks by its Western supporters. Olaf Scholz, the German chancellor, bowed to mounting pressure and said he would send German-made Leopards. He also agreed to drop a long-standing German ban on the re-export of Leopards by other European countries that have them. As part of an international agreement that involved a fair degree of ill-will, America said it would send its main tank, the M1 Abrams. But the tanks will take time to arrive, and Ukrainian soldiers will need weeks of training on them.

There is a war on you know

Volodymyr Zelensky cracked down on **government corruption** and the privileges of some Ukrainian officials. The deputy defence minister resigned after food was procured for the army at inflated prices. Several other officials and regional governors also stepped down. Mr Zelensky banned officials from taking foreign holidays; men of fighting age are not allowed to leave Ukraine.

Turkey's president, Recep Tayyip Erdogan, said he would not support Sweden's application to join **NATO**, after a far-right activist burned a copy of the Koran near the Turkish embassy in Stockholm. The foreign minister of Finland, which also wants to join NATO, said that maybe now was a good time for a brief pause in talks with Turkey.

Rishi Sunak, **Britain's** prime minister, came under pressure over a senior Tory's tax affairs. Nadhim Zahawi, the chairman of the Conservative Party and a former chancellor, said that he had reached a settlement with the authorities over previously unpaid tax relating to shares in YouGov, a polling company he helped to establish. Mr Zahawi said that he had been found to be "careless and not deliberate". Mr Sunak has referred the matter to his independent ethics adviser.

Burkina Faso's military government has given France a month to withdraw its troops, who have been fighting jihadists there for almost a decade. It is the second country in the Sahel region, after Mali, to expel Western forces and to have reportedly asked Russian mercenaries from Wagner Group for assistance.

Rwandan troops fired on a **Congolese** fighter jet, claiming it had violated Rwandan air space. Congo denied the jet had crossed the border. The incident comes after months of strain over claims that Rwanda is backing rebels who have taken control of several towns in Congo.

Tundu Lissu, an opposition leader in **Tanzania**, returned home after a ban on opposition rallies was lifted. He fled six years ago after being shot in an assassination attempt.

In **Eswatini** a respected lawyer was murdered outside his home in what many believe to be a political killing. Thulani Maseko was a strident critic of King Mswati, Africa's last absolute monarch.

Binyamin Netanyahu, **Israel's** prime minister, reluctantly fired Aryeh Deri from his cabinet following a Supreme Court ruling that he cannot serve as a minister because of a conviction for tax fraud and a suspended sentence. More than 100,000 people took to the streets of Tel Aviv in further protests against the government's proposed reforms of the Supreme Court.

The judge leading the investigation into the devastating explosion at Beirut's port in 2020 resumed his inquiry after a 13-month hiatus because of political opposition. In response, **Lebanon's** top prosecutor filed charges against the judge and ordered the release of all suspects detained in connection with the case.

Peru's government closed Machu Picchu, a 15th-century Incan citadel that is the country's most famous site, amid continuing protests against Dina Boluarte, the president, which have killed dozens of people. A group of left-wing legislators submitted a motion to impeach Ms Boluarte, who was sworn in only last month.

Visiting **Brazil's** largest reserve for indigenous people, President Luiz Inácio Lula da Silva accused the administration of his predecessor, Jair Bolsonaro, of genocide against the Yanomami tribal people. He described the deaths of hundreds of children in the area from preventable diseases over the last four years as a "premeditated" crime.

The trial opened in New York of Genaro García Luna, **Mexico's** security minister between 2006 and 2012. He is accused of having abetted the Sinaloa drug cartel. Arrested in Texas in 2019, Mr García Luna has pled not guilty to five charges, including conspiracy to distribute cocaine.

Democrats in California called for stricter gun-control laws following two **mass shootings**. The first attacker murdered 11 people at a dance studio in Monterey Park, a suburb of Los Angeles. In a separate incident a gunman shot dead seven people in Half Moon Bay, a coastal town south of San Francisco. The state already has some of the toughest regulations on the use of firearms in America, and the country's seventh-lowest death rate from gun violence.

Donald Trump is to be allowed back on Facebook and Instagram, two years after he was banned because of the risk that he could incite violence. Meta, Facebook's parent company, says it has put "new guardrails in place to deter repeat offences".

Running out of credit

America's treasury secretary, Janet Yellen, outlined the "extraordinary measures" her department is taking to keep paying the bills, after it hit a limit on **national borrowing** imposed by Congress. The debt ceiling is $31.4trn, but in a regular partisan showdown Republicans are refusing to lift the cap. The impasse could turn into a crisis by June.

Chris Hipkins was sworn in as **New Zealand's** prime minister following the resignation of Jacinda Ardern. Mr Hipkins was in charge of the response to the covid-19 pandemic. He says his priority as prime minister is to tackle the cost-of-living crisis, which is dragging his Labour Party down in the polls.

India used emergency powers to block a BBC documentary investigating Narendra Modi's role in the religious riots that swept Gujarat in 2002, when he was the state's chief minister. The programme was to be aired on social media. The prime minister has long rejected accusations that he could have stopped the violence, which killed at least 1,000 people, most of them Muslims. The government said the programme propagated a "discredited narrative".

The Committee to Protect Journalists, which is based in New York, reported that 67 members of the **media** were killed last year, the highest number since 2018.

Investors who hoped that 2023 would bring a change in fortunes to America's tech companies following their walloping in the markets in 2022 were left disappointed by **Microsoft's** earnings. The company reported solid revenue and profits for the final quarter of last year, but said the growth in demand for its cloud services, the main driver of its business, had softened as clients curtailed spending. It was the first of America's tech giants to publish results for the fourth quarter. Markets are nervously awaiting earnings reports from the others.

The word is out

Meanwhile Microsoft confirmed that it had increased its investment in OpenAI, the startup behind the ChatGPT **artificial-intelligence** bot. ChatGPT has become an AI sensation since its release on the market last November. Taking direction from just a few commands, it has passed exams in law and medical licensing, and completed the final exam in the Wharton MBA programme (which may not surprise anyone who has attended business school).

America's Justice Department sued **Google** for anticompetitive behaviour in online advertising. The suit alleges that Google tried to limit its rivals' access to digital-ad technology by acquiring firms that develop it and wielded its dominance in the market to force advertisers and publishers to use its products. The news comes after Alphabet, Google's parent company, announced 12,000 job cuts, another instance of the tech industry's great retrenchment.

In an indication of shareholder frustration at the strategic direction of some tech firms, **Elliott Management**, a prolific Wall Street activist hedge fund, has reportedly taken a stake in **Salesforce**, one of the world's biggest software companies. Salesforce has also shed jobs to cut costs, but investors' exasperation goes beyond its hiring spree to its $28bn acquisition of Slack, which critics think was overvalued.

Reed Hastings stepped down as chief executive of **Netflix**, which he helped found in 1997 as a DVD rental firm. He'll remain at the company as executive chairman. The streaming company, meanwhile, said it was pleased with the progress of its new ad-supported subscription option, and that it would ban the sharing of passwords to its service by the end of March.

Rupert Murdoch ditched a plan to remerge **News Corporation**, the newspaper side of his empire, with **Fox**, his television assets. The publishing and entertainment businesses were split in 2013 (21st Century Fox, the film studio, was subsequently sold to Disney). Mr Murdoch's proposal faced resistance from some News Corp investors unhappy at the prospect of being lumped together with Fox News, which they consider a toxic brand.

A German union said that **Ford** is planning to cut 3,200 jobs and move some activities to America. The carmaker has not confirmed the cuts, saying only that it needs to make structural changes amid the shift to electric vehicles. Press reports suggested that Ford was considering selling one of its German factories to BYD, a Chinese maker of EVs.

Qatar's investment agency has doubled its stake in **Credit Suisse** and now owns 6.8% of the Swiss bank, according to a regulatory filing. It is now the second-largest shareholder in Credit Suisse, after Saudi National Bank, which holds a stake of 9.9%.

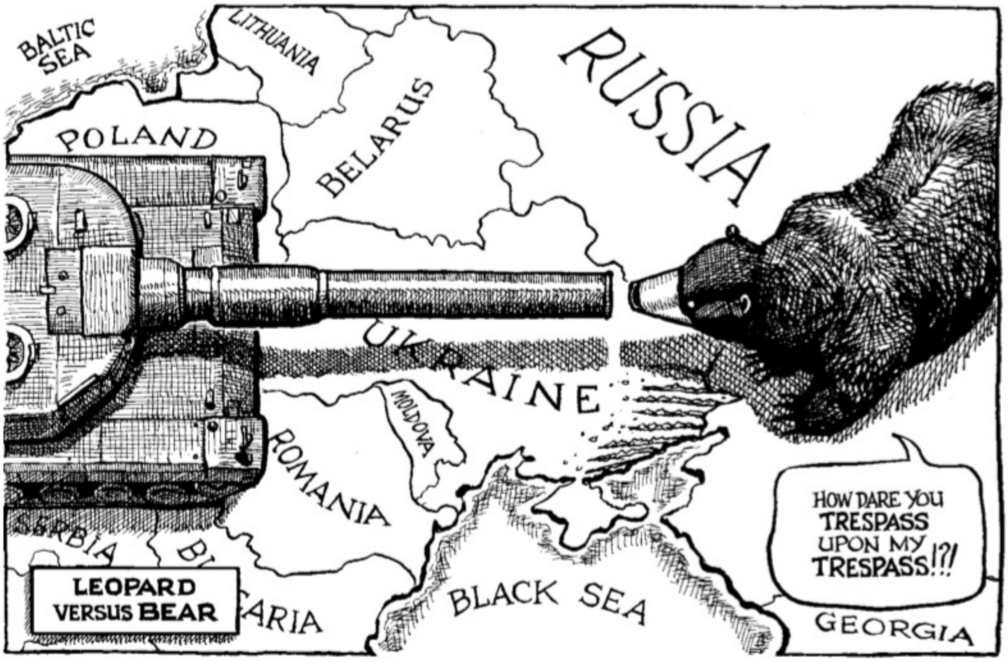
A uniform policy

In Boston a federal judge dismissed a lawsuit from three former workers at Whole Foods who claimed they had been sacked illegally for wearing Black Lives Matter masks. The judge found that the company had a legitimate business interest in upholding its **dress code**, which applies to all slogans and logos, and found no evidence that the three employees had been targeted.

Amazon warehouse workers in Britain held their first strike. The staff at a facility in Coventry walked out in a dispute over pay. Some claim they are monitored for their "idle time", such as going to the toilet. Many Amazon employees in Europe are unionised. The company has resisted efforts to unionise in America. The first union, at a warehouse in New York, was formed only last April.

Tesla reported record quarterly revenue and net profit, which came in respectively at $24.3bn and $3.7bn. It was good news for the carmaker after it missed its annual target for delivering vehicles.

Elon Musk took the stand at his trial for securities fraud in relation to a spurious tweet in 2018 about taking Tesla private. Mr Musk insisted he had never intended to mislead investors and "would be sad" if some had lost money as a result of the market reaction to the tweet. Asked whether the tweet's offer of $420 a share was a joke (420 is slang for cannabis) Mr Musk said it was just a coincidence, but there is some "karma around 420".



The humbling of Goldman Sachs

Being good in a bad industry is not enough

Goldman Sachs has always seen itself as exceptional. When the bank floated its shares in New York in 1999 it declared: "We have an uncompromising determination to achieve excellence in everything we undertake." Conspiracy theorists have long paid it the backhanded compliment of imagining that it secretly runs the world. Yet lately the only exceptional thing about the Wall Street icon has been its mistakes.

Since October Goldman has made a U-turn on its plan to build a big consumer bank; booked one of its worst quarterly results for a decade, measured by return on equity; and attracted a probe by the Federal Reserve (see Briefing). The firm is not yet in serious trouble, but it is trapped by its own mythology. Its recent struggles show how hard it will be to reform—and illuminate a new balance of power in global finance.

To understand Goldman today, take a walk down Wall Street. After the financial crisis of 2007-09, two big American banks reinvented themselves. JPMorgan Chase successfully pursued vast scale across a wide range of business lines. Morgan Stanley built a thriving arm managing the assets of the wealthy, which mints reliable profits. Goldman, however, stuck to its game of trading, advising on deals and bespoke investing. Penal new capital rules made this less lucrative, but the firm staked a Darwinian bet that the resulting shakeout would kill off many competitors. Instead, it badly underperformed the stockmarket for years and got ensnared in the 1MDB scandal, in which officials in Malaysia and Abu Dhabi received $1.6bn of bribes in 2009-14. A Goldman subsidiary pleaded guilty to a criminal charge and the firm admitted "institutional failure".

Goldman
Sags

The firm's boss, David Solomon, took over in 2018. A man with a short fuse, he has tried to rebrand himself and to renew the firm by expanding its core and diversifying into new areas. Goldman now offers transaction banking to multinationals, helping them move funds globally. It has bulked up its asset- and wealth-management arm. And from their Manhattan skyscraper, flush Goldmanites dreamed of growing a mass-market digital bank for ordinary consumers, including a credit-card operation.

Parts of Mr Solomon's strategy have paid off. Goldman's market share in mergers and bond trading has risen, helping it make a monster $21bn in profits in 2021 as markets boomed. From taxpayers' viewpoint, it is safer, with more capital and deposits. And, importantly, its share price has recovered lost ground, rising more than the market and those of most of its peers.

Yet look more closely and the project to remake the bank is vexingly incomplete. Diversification has been patchy: transaction-banking revenues are tiny and the asset-management arm is often dragged down by opaque proprietary bets. The dream of creating a consumer bank has soured. Goldman has 15m customers, but has also faced large losses and bad-debt charges, which is why it is now winding down part of the operation.

As the prospects for a big new earnings machine have receded, everything still rests on the traditional business. The profitability of the trading arm has improved but remains volatile and, on average, pedestrian. Overall, Goldman has made reasonable use of its resources, generating a return on tangible equity of 14% over Mr Solomon's tenure. But its performance is erratic, veering from 33% in early 2021 to just 5% in the latest quarter. It has lagged behind its American peers half of the time, and the two industry leaders, JPMorgan and Morgan Stanley, two-thirds of the time. Investors think that Goldman is worth only the net book—or liquidation—value of its assets, suggesting they doubt that it can generate consistently high returns or find lucrative new areas.

Goldman's struggles point to several lessons. One is that it still excels, but in a bad industry. Investment banking combines the drawbacks of a regulated activity (capital requirements and red tape) with the vices of a speculative one (volatility and capture by employees). The firm says it has become more disciplined on pay but last year forked out $15bn, its second-highest salary and bonus bill since the financial crisis, even as profits halved to $11bn and the firm barely beat its cost of capital. The real action in finance is outside regulated banking, where a new cohort of stars rules, including Blackstone in private markets, BlackRock in index funds, and Citadel, an investing and trading house that made its clients $16bn in 2022 (see Buttonwood).

Another lesson is that it is hard to compete in winner-takes-all digital markets. Goldman thought that brains and brand were enough. Not true. It has spent billions, but its customer base remains a fraction of that of PayPal or Amazon. JPMorgan reaches 66m American households, but maintains a vast physical network of branches. Goldman has achieved digital scale by teaming up with Apple to provide a credit card. However, given that the tech giant has almost a billion paying subscribers, Apple holds the whip hand in that relationship.

A final lesson is that the stagnation of globalisation has shrunk Wall Street's horizons. In the decade after Goldman listed, international revenues provided half of its growth, as its bankers conquered Europe and then broke into Asia. Today they supply a third of growth, as local competitors have emerged and some countries have become wary of foreign financiers. The number-one arranger of shares and bonds last year in China was CITIC Securities; in India Kotak Mahindra and Axis led the pack. These are names that many on Wall Street may not know.

Raging bulls

Can Goldman recover its swagger? Mr Solomon is wisely laying off staff and shrinking the bank's proprietary investments. Over time he may be vindicated by prosaic changes—running its asset-management arm better, say, or pioneering new tech to cut exorbitant labour costs—or even by orchestrating a merger.

Yet there is something uniquely hard about reforming elite firms whose unwritten code is that they are smarter than everyone else. Just ask McKinsey, a scandal-magnet once known as the world's most-admired consultancy. Goldman's culture of self-regard remains at odds with the facts. Instead it now needs to be self-critical. For yesterday's masters of the universe, that may be the hardest leap of all. ■

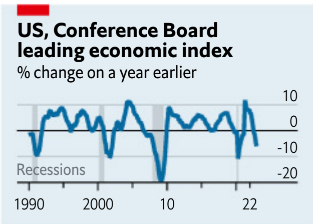
The world economy

Polycrisis or polyrecovery?

Despite glimmers of good news, a downturn is still likely

After three chaotic years, investors have several reasons to be cheerful about the world economy. In America inflation is tumbling, raising hopes of a "soft landing", in which price growth comes under control without a recession. Fortune has smiled on Europe, where a mostly warm winter has caused energy prices to plummet. And China's economy, freed from Xi Jinping's destructive "zero-covid" policy, is poised to rebound. Markets are joyous. The S&P 500 index of American stocks has risen by 5% since the start of the year. Share prices in Europe and emerging markets are up by even more.

Alas, it is too soon to declare an end to the world economy's problems. In America consumer prices fell in December, and annual inflation may dip below 2% this year thanks to cheaper energy and goods. Yet as price growth is plunging, so too is GDP growth. Retail sales and industrial production fell in December and leading indicators of output are down sharply—which usually indicates that a recession is nigh. The healthiest part of the economy is the labour market (see Finance & economics section). But the red-hot demand for workers is not entirely good news: the Federal Reserve will find it harder to be sure that inflation has been tamed.


US, Conference Board leading economic index

% change on a year earlier

Despite headline-grabbing lay-offs by the big technology firms, America's unemployment rate remains just 3.5% and new claims for unemployment benefits are at their lowest in three and a half months (see Graphic detail). Annual wage growth has fallen according to some measures, but remains around 5%; on January 24th Walmart said it would raise starting wages from $12 an hour to $14. Because workers' productivity is growing by only about 1% a year, fast wage growth portends price rises that far exceed the Fed's 2% inflation target.

Some policymakers hope that companies, whose profits surged in 2021, can absorb rapid wage growth without prices having to rise further. Yet by last autumn, higher profit margins accounted for only an eighth of pandemic-era inflation. Given that Wall Street is expecting disappointing earnings for the fourth quarter of 2022 (see Business section), this suggests that firms will raise prices in line with their labour costs.

Markets expect the Fed to start cutting interest rates within a year as growth slows. But if the Fed is serious about reducing inflation to 2% and keeping it there, it will need to keep rates high until wage growth cools—even if that brings about a recession.

Should America face a downturn, it is likely to take Europe with it. Despite falling energy prices, the euro zone also has an underlying inflation problem, as is apparent in rising wage growth. Christine Lagarde, the head of the European Central Bank, has warned that interest rates will have to rise significantly, contrary to the more doveish expectations of investors. A stronger dollar—which is likely if the Fed keeps raising rates and investors take fright at the consequences—would raise imported inflation and make the ECB's job harder still, while also paring back the rally in emerging markets.

The end of zero-covid in China has lowered the chance that supply chains will gum up. However, its rebound is not an unalloyed good for the rest of the world, which has an inflation problem, not a shortage of spending. China's extra imports will add more fuel to overheated economies. Europe's gas storage is so full in part because China's demand for liquefied natural gas in 2022 was 20% below its usual level. Demand is now likely to bounce back, which could cause prices to surge once again next winter. Only when the twin foes of overheated labour markets and the energy crisis have been vanquished will the world economy be out of the woods. ■

Housing in China

Rescue and repeat

China's property slump is easing. But the relief could be short-lived

The love-hate relationship goes on. For almost two years China's leaders cracked down on borrowing to build and bet on property, plunging the market into a crisis. Now that the economy has been weakened by the failures of the "zero-covid" policy, the government is racing to rescue real estate. Ni Hong, China's housing minister, has said his ambition this year is to restore confidence; a series of measures announced in the past few months seek to make it easier for developers to raise capital. These efforts are reviving the property market. Unfortunately, they leave it just as vulnerable to boom and bust as ever.

The downturn of 2022 was the most severe in recent memory. Sales of floor space plunged more sharply than ever before. Property investment fell for the first time since records began in 1999. Funds raised by developers fell by a quarter. For the past 15 years house prices in China mainly went up. They have spent the past six months sagging like a termite-weakened floor.

One reason for the pain was the government's attempt to break the country's addiction to debt-financed property. More than two-thirds of urban households' wealth is tied up in real estate and the industry underpins a fifth of GDP. Developers have built up huge debts, worth about 33.5trn yuan ($5.2trn) in June 2021. In 2020 the government cut off many firms from capital markets, requiring them to reduce their debts. Dozens defaulted, spreading the pain to lenders and customers. Many new homes went unfinished, although they had been paid for. Borrowers suspended mortgage payments in protest.

▸▸

Together with President Xi Jinping's zero-covid policy, the crackdown proved a disaster for the economy. GDP grew by just 3% last year, one of the worst performances in decades. The covid lockdowns also worsened the housing crisis, as fewer prospective buyers were able to visit empty flats and many young people, worried about an uncertain future, put off big purchases.

Now zero-covid is over and policymakers are rushing to revive animal spirits. Limits on how much some developers are allowed to borrow have been suspended. The central government has ordered banks to rescue unfinished projects. Some local authorities are putting up guarantees for developers so that they can raise more debt.

These measures are breathing new life into the market. The number of new homes that are being completed fell by only 6% in the 12 months to December, having plunged by 18% in the year to November. It appears that government funds are being channelled to pre-paid projects that have stalled. As people who have paid for homes finally start to get their hands on the keys, prospective buyers may be reassured and tempted to bid for pads of their own.

Sales of existing homes rose by more than 20% in the first ten days of 2023, compared with a month earlier. Some developers are no longer offering their flats at a discount. And, crucially, a property firm was able to raise dollar debts from foreign investors in mid-January, the first such instance in more than a year.

All this means that the Chinese economy should bounce back more quickly in the near term, helping to propel global growth. The danger now, however, is that China goes too far.

Technocrats tend to respond to crises with lots of liquidity. During the global financial crisis of 2007-09 much of China's vast stimulus flowed into bricks and mortar. A property downturn in 2014 led to a bout of monetary easing that saw house prices in some places double in less than a year. Elsewhere the result was rampant overbuilding; hence the high-rise ghost cities that loom over parts of China.

Local governments, meanwhile, still rely heavily on land auctions for revenue, so they have an incentive to keep sales going. They are already stepping in to support large developers by guaranteeing their commercial paper. If they have their way, the property market will come roaring back.

A rekindling of such forces would be disastrous for the central government. They would lift home prices to new heights and lead to another build-up of unsustainable debts among developers. Officials would be forced once again to crack down on leverage, repeating a cycle they have already been through several times.

You might think that the recovery would instead offer room for more considered thinking. But China's leaders have long lacked the will to implement the necessary reforms. A housing tax, for example, has been floated several times. It would curb speculation and generate much-needed income for local governments. But the urban elite, which stores much of its wealth in property, would hate it. So far only a few pilot schemes have been tried out.

And so the funding model for local governments remains unchanged. Local officials will keep trying to pep up sales and prices. But who will live in all the new homes? Morgan Stanley, a bank, estimates there will be 90m new urban households in the next decade. But at its peak, China was adding about 15m homes a year. If supply is to match demand, construction will have to slow dramatically, especially as China's population shrinks. Today's bail-out may be reviving Chinese property, but without real reforms the sector will be doomed to boom and bust again. ■

Industrial policy

Main course, not sweeteners

Britain's industrial policy should focus on getting the basics right

When rival countries have much deeper pockets and are digging into them, what is a government to do? That is the question facing Britain as it mulls what its industrial strategy should be. A good way to think about the answer is to look at the country's automotive industry.

Carmaking in Britain has long enjoyed ups and endured downs. But the down it faces now is graver than any in decades. The shift from internal-combustion engines to electric vehicles is prompting an overhaul of the industry, which will spend about $1.2trn on electrification globally by 2030. Carmakers need new supply chains and new skills. Above all, they need batteries—lots of them, ideally within easy reach of assembly plants. To be a base for mass production, Britain must be home to huge battery-making facilities known as "gigafactories".

Across Europe, more than 40 of these facilities are being built or planned. Barely any of them are in Britain. One is being set up in Sunderland by Nissan and Envision, a Chinese firm: it will start production in 2025. Britishvolt, a startup with lots of champions but no customers, collapsed earlier this month. Some manufacturers are already voting with their feet: BMW is moving production of electric Minis to China (see Britain section).

Other governments are happily splurging to encourage electric-vehicle manufacturing. Arrival, a British maker of electric delivery vans, moved production from Oxfordshire to North Carolina because of the handouts in America's new Inflation Reduction Act. Northvolt, a battery startup in Sweden, counts the European Investment Bank among its investors. No wonder the pressure is on for the British government to shell out. Talks are thought to be under way with Tata, the Indian conglomerate that owns Jaguar Land Rover, on what subsidies might persuade it to site a gigafactory in Britain.

In a subsidy race Britain will never be able to outspend America or the European Union—nor should it try. If the government wants to help British industry, it should focus on its most basic responsibility, to provide a stable, well-run environment in which the private sector can flourish. And here Britain can do so much better, for its automotive industry and for others, without spending anything at all on subsidies.

The real problem for British carmakers is that the country has become a less attractive manufacturing base at just the moment ▸▸

when investment is needed. Britain's carmakers export 80% of their output, more than half of it to the EU. Brexit has already made seamless access to European markets more difficult. And at the end of this year rules on how much of an electric vehicle's parts have to be made in either Britain or the EU to qualify for tariff-free trade with Europe will start to tighten. An agreement to extend existing grace periods on these rules-of-origin requirements might help; better relations with the EU definitely would.

Instead, unstable policy makes things worse. Boneheaded legislation committing Britain to replacing or repealing all retained EU law by the end of 2023 could mean friction with Brussels over labour-market standards. At home, too, uncertainty reigns. The government announced in 2021 that a zero-emissions vehicle mandate, laying out what share of manufacturers' new sales needs to be emissions-free, would begin to apply in 2024. With 11 months to go, the industry is still waiting for details. Investment incentives are up in the air. A "super-deduction" on capital investment expires at the end of March; a plan to cut R&D tax deductions for smaller firms that was unveiled in November may be reversed. Industrial policy itself is a muddle. A strategy from 2017 was junked by Boris Johnson's government.

Back to basics

There are times when Britain will need to spend money to promote its national-security interests or environmental priorities. But resources are finite and it is especially unwise to bail out whichever industry is first to get into trouble. Britain is the 18th-biggest carmaker in the world and has no obvious competitive advantage in this area (unlike in life sciences and clean energy). It is good news that the country's industries would be a lot more successful if the government did the basics well. Sweeteners matter less when other things taste better. ■

Egypt

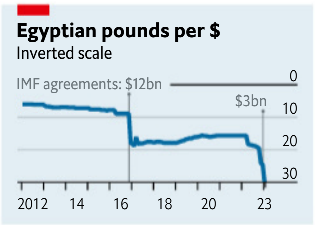
Debt on the Nile

To save Egypt's economy, get the army out of it

TO THE LIST of spectacular ruins across Egypt, you can now add its economy. The Egyptian pound lost half its value over the past year and has been the world's worst-performing currency in 2023. On January 5th the government devalued it for the third time in less than a year. Nearly half of the state's revenue goes to servicing its debts, which amount to 90% of GDP. Officially, inflation is running at 21%. The price of food is rising even faster. But official figures have not kept up with Egypt's economic decline, so the reality is almost certainly worse.

This has brought misery to the Egyptian people. Around a third of them live on less than $2 a day. Another third are on the brink of joining them. They have been failed by officials who put their own interests above those of their citizens.

Egypt's economic crisis has been a long time in the making, and is partly caused by forces beyond the state's control. Russia's invasion of Ukraine has hurt Egypt badly, since it is the world's biggest importer of wheat and its two biggest suppliers have usually been Russia and Ukraine. Higher wheat prices have made it ruinously expensive for the government to provide the ultra-cheap, subsidised bread that Egyptians have come to expect (they may riot if it is unavailable). The war has also walloped tourism which, before the pandemic, generated about 5% of GDP. Costly grain and a lack of sunburnt Russians have put pressure on Egypt's foreign-exchange reserves and the pound. Foreign investors have dumped Egyptian bonds. Egyptians now struggle to get hold of hard currency.



But the country's main underlying problem is the stranglehold on the economy exercised by the state, and specifically the army. Official statisticians are strangely reluctant to provide a measure of this. The government has said that the army controls just 1.5-2% of output. The true extent of its influence, both direct and indirect, is far greater. And under the rule of President Abdel-Fattah al-Sisi (previous job: commander-in-chief of the armed forces) it has expanded.

The army's empire now includes everything from petrol stations to mineral water and olives. It has hooked the fish-farming market and engineered control over carmaking. The security services have bought up big chunks of Egypt's media. The army built a huge new cement plant, causing a supply glut that crushed private firms. In industry after industry it squeezes out or scares off competitors, deterring private investment. No ordinary company can compete with an outfit that pays no tax or customs fees and which can throw its rivals in jail. For ordinary Egyptians, the army's crushing of competition means slower growth, higher prices and fewer opportunities.

The IMF should bear this in mind, as Egypt comes knocking on its door for the fourth time in six years begging for a bail-out. It is now the fund's biggest debtor after Argentina. In the past Mr Sisi's regime has agreed to carry out reforms in exchange for IMF cash. Under the terms of a $12bn agreement struck in 2016, it has devalued the currency and trimmed subsidies. But Mr Sisi has conspicuously failed to keep his promises to reduce the state's economic bootprint.

Under its most recent deal with the IMF, struck in December, the government has vowed once again to withdraw the state and the armed forces from "non-strategic" sectors. But the men in (or recently out of) uniform who dominate it have little incentive to do so. Many have benefited handsomely from rent-seeking. And in any case, in a country with a history of coups, few would dare challenge the army's privileges.

Donors keep bailing out Egypt because they are terrified it might collapse if they do not. It is the most populous country in the Middle East and a key Western ally. An implosion might send fleets of refugees across the Mediterranean. These fears are not irrational. Yet supporting a regime whose refusal to reform makes Egypt steadily poorer and its people steadily angrier is no recipe for long-term stability. Egypt's frustrated Gulf allies are becoming less generous. The IMF should now hold the government to its commitments. Egypt must start demilitarising the economy, or expect fewer handouts. ■

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Poland's war claims

You think that Poland is wrong to keep pressing Germany on restitution for Nazi crimes during the second world war ("Frenemies on the Oder", January 7th). Yet Germany's recent payment to Namibia for the massacres it committed there in the early 1900s, its return of Benin bronzes to Nigeria and the belated verdicts for concentration-camp staff show that injustice is not expunged by time.

Poland has received only derisory compensation for the millions of deaths, expulsions, colonisation, slave labour and destruction of a large chunk of its physical assets during the war. The "vast tracts of land" that Germany has ceded to Poland cannot compare to Poland's loss of half its terrain after 1939, including the then majority-Polish cities of Wilno (Vilnius) and Lwow (Lviv). This loss was caused by Germany's war. The contrast with Germany's decent treatment of Israel is glaring.

And it is incorrect to ascribe the push for compensation just to some zany folk in the ruling Law and Justice (PiS) party, even if its German scepticism is indeed extreme. Last September 418 out of 460 Polish MPs voted to press Germany for restitution. Around two-thirds of Poland's population think Germany should finally pay for its war damage.

MATTHEW OLEX-SZCZYTOWSKI
Bicester, Oxfordshire

Turkey responds

I was appalled by your leader on "Turkey's looming dictatorship" (January 21st). Labelling the prospect of the re-election of Recep Tayyip Erdogan, who has been elected many times through a free and popular vote, as a "dictatorship" is utterly wrong and unfair. I would like to remind you that Türkiye has a vibrant democracy with a clean record in its electoral system. Such biased claims about the democratically elected president of the country ignore the stainless electoral history of Türkiye.

Moreover, calling upon "Western leaders" to act over some baseless assumptions and underestimating the free will of Turkish voters is pointless arrogance to say the least. This approach contradicts with people's free will and basic merits of democracy.

ÜMIT YALÇIN
Ambassador for Turkey
London

Levels of fitness

The gutting of schools' physical-education requirements is cited as one reason behind America's obesity problem ("Marching on their stomachs", January 14th). However, school PE programmes often serve unfit students very poorly. They are designed by the fit, for the fit, and make little attempt to be rewarding and halfway-pleasant for the less-fit. They emphasise competition between students with little allowance for differing levels of ability. Seriously unfit children find them painful and humiliating rather than helpful.

Schools could indeed do more to get children into better shape, but in this regard the focus should be on helping the less-fit to find sustainable ways to get more exercise, not on selecting and training top student athletes.

HENRY SPENCER
Toronto

Britain's post-Brexit economy

The "phantom country" created by the Centre for European Reform to track Britain's post-Brexit economic performance is invalid ("Careful assembly required", January 7th). Macroeconomic theory tells us that the only economy that behaves like Britain is one that has the same consumers, firms, institutions, policies and shocks, namely only Britain itself. A method that is valid is to interrogate Britain's own relationships for evidence that they shifted because of Brexit. I have done this in a recent working paper with a colleague.

We find statistically significant evidence of temporary disruption to trade, as you would expect, but none of the damage to investment or GDP. The main plainly observable effect of Brexit was to lower sterling. But our Britain model and the evidence of Brexit impacts on British behaviour imply that this and succeeding Brexit effects had quite small net effects on the economy, mainly on interest rates and inflation, during the covid era.

Meanwhile, a long list of other shocks, including lockdowns and commodity impacts because of covid and the Ukraine war, have caused us substantial damage. It is unworthy of *The Economist* to join in the sloppy Remainer thinking that blames our troubles on Brexit.

PATRICK MINFORD
Cardiff Business School

The rich get richer…

"When money dies" (December 24th) focused on the lessons from inflation of the 1500s. One further contemporary parallel emerging from the 16th-century Scottish context is the uneven impact of inflation across the population. Even in the 16th century, inflation for essential goods outstripped that for luxury items. And wages lagged behind price rises. Accordingly it was the poor who suffered most and the rich who were cushioned by the relatively smaller portions of their budgets devoted to essential items.

For example, in the decade following the replacement of gold and silver in coins with cheaper metals, known as the great debasement, the wages paid to wrights (skilled workers, carpenters or joiners) increased by 25%. But the cost of fabric canvas, used for workers' clothing, went up by 68%, and ale, the drink of the people, by 50%. At the other end of the market, velvet went up by 41% in price. Wine, the luxury imported tipple of the rich, increased by 13%, but a few years later it was retailing at 20% below its price before the currency debasement. Velvet-clad wine connoisseurs had it far easier than their canvas-sporting, beer-drinking employees.

In the 16th-century context this cushioning of the wealthy from the worst effects of rising prices offers an answer to a puzzling dilemma which transcends that century: why did successive governments, comprising the wealthiest in the land, pursue a policy the effects of which they knew to be inflationary?

DR AMY BLAKEWAY
School of History
University of St Andrews
St Andrews, Fife

No room at the top

I enjoyed your article on Prince Harry's autobiography ("Spare us", January 14th). It reminded me of "elite overproduction", an idea put forward by Peter Turchin, a complexity scientist, in which a society produces more members of the elite than the elite can absorb. This, Mr Turchin thinks, can lead to social instability, because those left out of power feel dissatisfied with their lower socioeconomic status. The royal family provides us with perfect examples of this. Those left out of power are causing a great deal of instability at Buckingham Palace.

PHILLIP JORDAN
London

Working in your 70s

In the unpopular political drive to raise the retirement age in France, Emmanuel Macron should remind his countrymen that Georges Clemenceau took over as France's leader in 1917 at the age of 76, and led it to victory in the first world war in 1918 ("Macron's retirement gamble", January 14th).

PATRICK SLATTERY
Dublin

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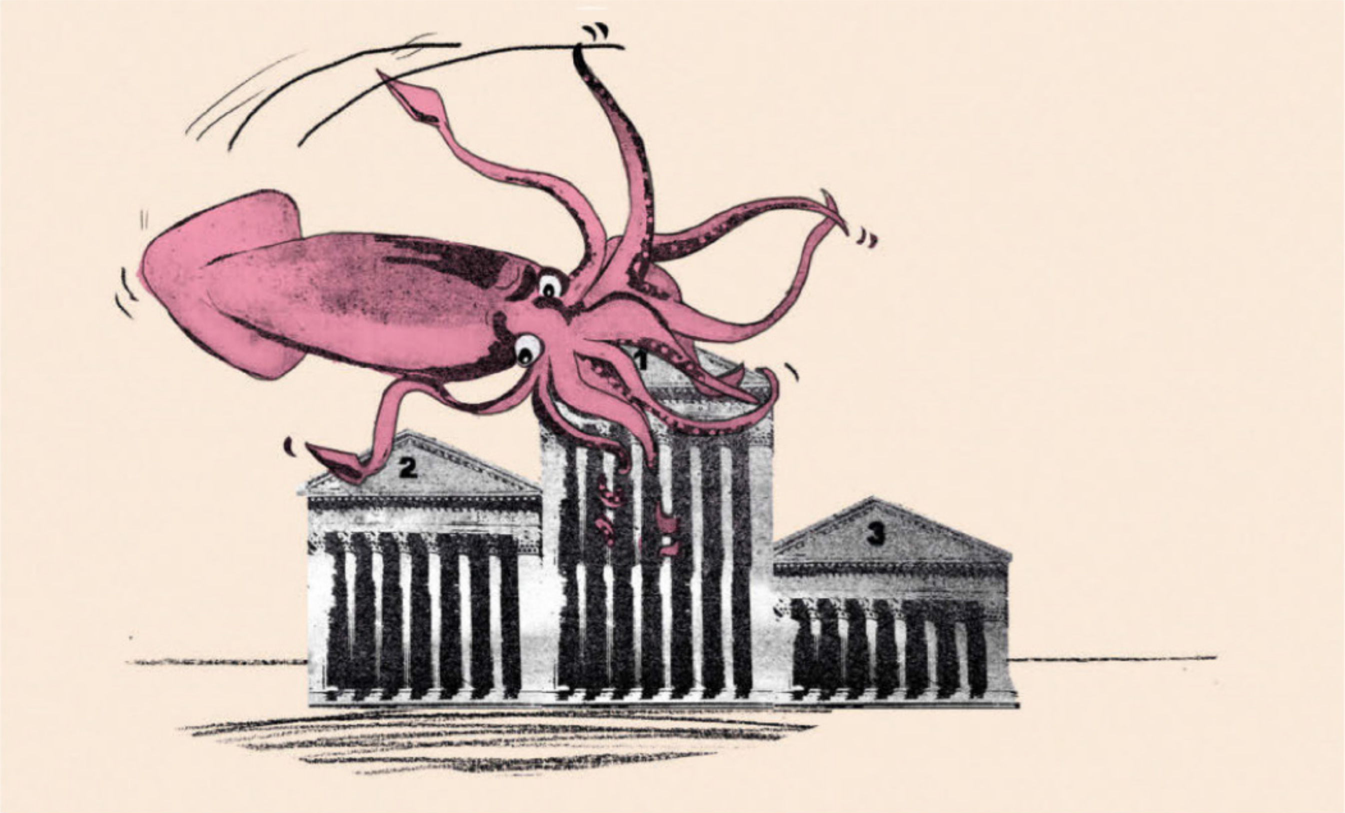


Vampire squib

NEW YORK

How a storied investment bank went from apex predator to Wall Street laggard

THIRTEEN YEARS ago, when *Rolling Stone* described Goldman Sachs as a “great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money” the description stuck, not just because it was vivid, but because it was a little bit true. Goldman made pots of money, more than anyone else on Wall Street. After the global financial crisis of 2007-09, most of the big financial institutions that survived were left licking their wounds, paying back bail-outs and pleading for forgiveness. Not Goldman: in 2009 it raked in $13.4bn in profits, its best year ever at the time and a record that stood for more than a decade.

Rolling Stone accused the firm of being “everywhere”, and that was not so far from the truth either. Goldman’s best and brightest, having cut their teeth on its trading floor or in wood-panelled conference rooms finessing mammoth deals, founded formidable hedge funds or giant private-equity firms. The revolving door between Goldman’s headquarters and the United States Treasury seemed to spin freely, regardless of which party occupied the White House: three recent secretaries of the Treasury and numerous underlings have been Goldman alumni. There have been lots at the Federal Reserve and other regulators, too. And former Goldmanites have helmed the European Central Bank, the World Bank and the governments of Australia and Italy. Goldman seemed omnipresent, omniscient and omnipotent.

Rolling Stone was far from the only critic of all this, but Goldman revelled in the attention. Indignant commentators marvelled at how it managed to mint money through good times and bad, often accusing it of ruthlessness or predation. Yet that reputation was also the reason that corporate bigwigs clamoured for Goldman’s advice when issuing debt or equity or taking their firms public. Goldman was staffed by winners—it was better to have them on your side.

That is not the story anyone is telling about Goldman Sachs any more. Morgan Stanley, a rival it long sneered at, has comprehensively outperformed it over the past decade. Its bosses, unlike Goldman’s, quickly grasped that the regulatory regime imposed after the financial crisis would require a shift away from speculative and volatile trading towards more predictable and safer businesses, and diversified accordingly. It took Goldman years to initiate a similar shift. But even since its adaptation has accelerated under its current boss, David Solomon, it has little to show for it.

On January 17th Goldman reported dismal earnings for the fourth-quarter of 2022 of just $1.3bn in profit and a 4.8% return on tangible equity (a no-nonsense measure of profitability), which Mr Solomon described as “disappointing” and “not what we aspire to deliver to shareholders”. It is not just peers on Wall Street that Goldman has fallen behind: its consumer-lending business has had to make higher provisions for bad loans than almost any bank in America. Earlier this month the *Wall Street Journal* reported that the Federal Reserve was investigating whether the unit in question had been monitoring its lending carefully enough.

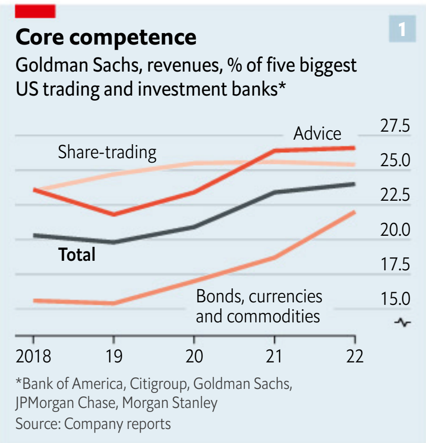
Last year was difficult for many financial firms. Rising interest rates and plunging stockmarkets discouraged the transactions that are investment banks’ bread and butter. Most Wall Street firms are making lay-offs and cutting costs. But Goldman’s missteps have required earlier and deeper cuts. Its bonus pool for senior staff was reportedly halved, something elite bankers rarely take well. On January 11th the firm laid off 6% of its workforce.

The problem is not really Goldman's main business, advising corporate clients and executing trades for them. The profits of these divisions are strongly cyclical, but they have done well in recent years. The wild swings in asset markets in 2020 pumped up trading volumes; the roaring bull market of 2021 led to a surge in initial public offerings, mergers and acquisitions; in 2022, despite adverse conditions in other respects, Goldman's bond-traders were able to capitalise on rising rates. The bank made $21.6bn in profits in 2021, at last besting the record set in 2009. Return on tangible equity was a whopping 24.3%, its highest since 2007.

Crucially, Goldman did not simply benefit from favourable conditions in the markets; it also managed to win business from its rivals. Its share of the bond-trading revenue earned by the five biggest American banks in the business—Bank of America, Citigroup, Goldman Sachs, Morgan Stanley and JPMorgan Chase—has grown from 15% in 2019 to 22% in 2022. It has also won a bigger slice of share-trading business and the market for advising firms on M&A and IPOs (see chart 1). Even if the total volume of such business among the five banks had not grown, Goldman's revenues would have risen by 18% from 2019 to 2021, owing to its expanding market share. As it was, the boom in those businesses propelled a heady 68% leap in revenue over the period.

Goldman points out that this growth has been accompanied by better returns, too. The return on equity in its markets and investment-banking divisions, which were merged in the fourth quarter, has climbed from just 9.2% in 2019 to 16.4% in 2022. (The comparison may be a little misleading, in that 2019 was the year that Goldman booked a $3bn fine for issuing billions of dollars of bonds for 1MDB, a Malaysian government investment fund, the proceeds of which promptly vanished. But returns in markets and investment-banking climbed by around three percentage points from 2020 to 2022, which is nothing to be sneezed at.) Since Mr Solomon took charge in 2018 the firm's average annual return to shareholders has been an impressive 13.2%, thanks largely to these units.

The problem is that investment banking is volatile, as the past quarter's results show. Investors tend to value steadier, more predictable returns. This is precisely what Mr Solomon promised them when he became CEO in late 2018. By that stage Goldman had suffered a decade of stagnation. Regulators had forced it to convert itself into a bank in 2008, with all the extra red-tape that entails. New rules had also required it to hold more capital against risky activities, such as speculative trading on its own behalf, which had been a big source of profits. All this markedly dampened returns. An investor who purchased a share in Goldman on December 31st 2009 would have made a measly 4.5% a year on average, including dividends, by the time Mr Solomon took charge.



Core competence

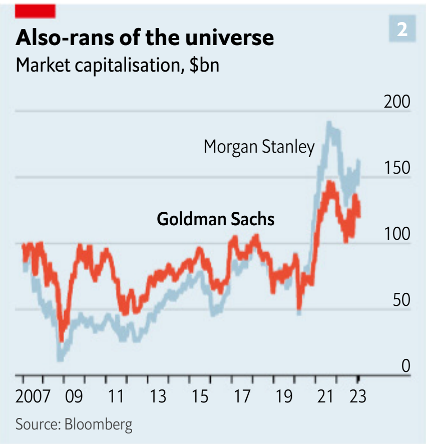
Goldman Sachs, revenues, % of five biggest US trading and investment banks*

*Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley

Source: Company reports

Mr Solomon was going to change all this. He promised not only to improve returns in Goldman's core units, as he has done, but also to hasten its move into steadier, more predictable businesses, such as consumer lending and wealth-management. The idea was to generate lots of recurring revenues and thus deliver much more stable returns.

A similar strategy had worked wonders at Morgan Stanley, which in Goldman's all-conquering era had been a perennial also-ran. James Gorman, who became its boss in 2010, recognised early that regulators would make the glamorous but cyclical businesses of investment banking and trading less attractive. He engineered the purchase of Smith Barney, a wealth-management business, from Citi when that lender was still struggling. The attraction was the predictable income from the fees that clients pay every year to have their money looked after. In 2020 Mr Gorman doubled down on that strategy, which he describes as balancing the "engine room" of the investment bank with the "ballast" of wealth management, by purchasing both E*TRADE, an online share-trading platform, and Eaton Vance, another asset manager for a total of $20bn.



Also-rans of the universe

Market capitalisation, $bn

Source: Bloomberg

Shareholders in Morgan Stanley are delighted. Since Mr Gorman took the top job on January 1st 2010 a shareholder in the firm would have earned an average annual return of 11.4%—50% more than the equivalent figure at Goldman Sachs. A few months before Mr Solomon took over at Goldman the market capitalisation of Morgan Stanley drew level with that of Goldman for the first time since before the financial crisis. Today Morgan Stanley is worth a third more (see chart 2).

A similar attempt to diversify was initiated at Goldman by Lloyd Blankfein, Mr Solomon's predecessor, who ran the bank from 2006 to 2018. In 2016 he launched a consumer bank, called "Marcus by Goldman Sachs", a nod to Marcus Goldman, who founded Goldman Sachs in 1869. The new unit started as an online platform to take deposits, in an effort to lure the kinds of low-cost, sticky funds that benefit rivals with consumer banks such as JPMorgan Chase and Bank of America. Goldman subsequently launched the lending drive, something Mr Blankfein described at the time as a good business for the firm since it hinged on credit scores, algorithms and "risk management, which we think we're pretty good at". The plan was to offer personal loans of up to $30,000 to help customers manage credit-card debt.

Soon after came a credit-card partnership with Apple, organised by Mr Blankfein and launched by Mr Solomon in 2019. In 2021 Mr Solomon expanded the consumer-lending business yet more by buying GreenSky, an online platform that makes home-equity loans, for $2.2bn. After a reorganisation of Goldman's different divisions last year, the second on Mr Solomon's watch, much of the consumer-lending business has moved to a part of the business called "platform solutions". It has made cumulative pre-tax losses of $3.8bn since 2020. These grew from $800m in 2020 to $1.9bn in 2022.

Denis Coleman, Goldman's chief financial officer, argues that the consumer business is not doing as badly as it seems. He points to accounting rules, implemented in 2020, which force Goldman's lending arms to front-load the cost of a loan by making provision for possible future losses the moment the money leaves the bank. A business which is expanding its lending racks up big costs in this way before a penny of revenue has been earned, which creates a misleading drag on results.

However, Goldman is also having to set aside a far higher proportion of the value of its loans than its peers, suggesting it is ▸▸

lending to the wrong people. In the fourth quarter it made provisions of 13.5% of the loans it issued. That is double the level of Capital One, a subprime lender, which set aside only 7% in the same period.

Mr Coleman blames the lending unit's youth. "If you have had a portfolio of credit-card loans for 15 or 20 years you have a very good set of data and you have removed clients from that portfolio that went delinquent." Because Goldman's loan book is so new, he argues, the bank has not yet weeded out the bad seeds. Yet even compared with recent startups, such as Affirm, which makes instalment loans, Goldman fares poorly. Affirm, which launched in 2012 but only began lending in earnest several years later, sets aside half what Goldman does (see chart 3).

Goldman's other defence is that consumer lending is a tiny fraction of its business. Just 3% of revenues and only 4% of common shareholder equity (about $4bn), is allocated to that part of the firm. But consumer lending was not supposed to be an obscure sideline for Goldman in the long run. The point of diversifying was to make a significant reduction in the share of the bank's earnings affected by volatility in capital markets. The damage done to Goldman's bottom line by the consumer-lending business is also more severe than those numbers make it sound. Of the entire firm's $33.7bn of expenses and provisions in 2022, platform solutions accounted for $3.5bn-worth, more than 10% of the total.

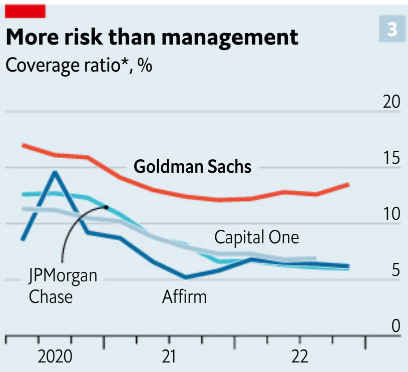
The firm admits that something has gone badly wrong. It has stopped making consumer loans through Marcus. Mr Solomon said in a recent call with analysts that Goldman had tried to do "too much, too fast" and perhaps "lacked the talent" to flourish in the markets concerned. Investment bankers in expensive suits, a financier quips, know little about consumer finance, where polyester is more typical.

The other main element of Goldman's effort to diversify its income streams was to do as Morgan Stanley has done and gin up its wealth-management business, thereby boosting reliable revenue from fees. In 2019 Goldman acquired United Capital, a small wealth manager which served rich (but not ultra-rich) customers, for $750m. It has since folded that firm into an existing business called Ayco, which specialises in executive coaching.

In 2020 Goldman set a target of earning $10bn from management fees by 2024. It seems likely to hit it: fees climbed from $6.8bn in 2020 to $8.8bn in 2022. But even $10bn is a relatively small slice of the firm's $47bn in revenue in 2022. The expansion of parts of the wealth-management business has been "a little slower" than hoped, concedes John Waldron, Goldman's chief operating officer.

More risk than management

Coverage ratio*, %



*Total allowance for consumer credit card or instalment loan losses divided by total loan portfolio

Source: Company reports

What is more, the steady wealth management is now paired with Goldman's much more volatile asset-management business. Returns in that unit gyrate because it invests not just its clients' money, but Goldman's as well. The firm says it will cut back on this form of investing, but not eliminate it entirely. "Our investors like to know that managers have some form of skin in the game," explains Mr Coleman.

Another thing that was supposed to change under Mr Solomon was Goldman's corporate culture. Unlike his buttoned-up predecessors, he can be lighthearted. He once wore sweatpants to a meeting to woo the executives of Lululemon, the yoga-attire company. He moonlights as a DJ and relaxed the dress code. He was even declared a "woke dude" by *Vanity Fair* in 2018 because he suggested that employees not busy with an imminent transaction did not need to work on weekends and that putting in 70 hours a week was probably sufficient.

Mr Solomon started inviting big investors to annual powwows in 2020—a common practice on Wall Street but a first for Goldman. This was the most notable element of a push to be more open and engage more with shareholders. "We had been a public firm for 21 years and we had never done an investor day before," says Mr Waldron. "I always felt like that investor day, the first investor day, was kind of like a re-IPO, where you had a new management team, and we were embarking upon a reasonably fundamental shift in strategy."

But as Mr Solomon's tenure has gone on, this kinder, gentler approach has fallen away. Last year he urged all staff return to the office full-time, putting an end to pandemic-induced home-working. His penchant for reshuffles and a management style that is most kindly described as blunt seem to have precipitated a series of high-profile departures. Senior executives such as Gregg Lemkau, head of the investment bank; Omer Ismail, once head of the consumer bank; and Eric Lane, head of asset management, have all left the firm. Bosses of other banks say it has become easier to poach Goldman partners.

Having professed to want a smaller, more elite group of partners and having elevated just 60 people in 2020, Mr Solomon appointed 80 new partners in 2022. And they are of a different kind. In 2016 some three-quarters of new partners had joined the firm as analysts or associates, at the start of their careers. By 2022 just 43% had. In the old days a job at Goldman was a one-way ticket to wealth and power. That inspired ambitious young people to join fresh from college and spend a lifetime at the firm. Its staff these days seem less devoted to that cause.

Tentacles in a twist

With consumer lending in disarray, wealth management growing only slowly and the cultural overhaul going into reverse, the new Goldman Sachs looks a lot like the old Goldman Sachs, albeit with a small, loss-making consumer arm tacked on. It retains its superb advisory and markets arms, which make up around 70% of the firm, but yield volatile returns, as does its asset-management unit.

This array of businesses does not seem to excite investors. In 1999 Goldman's share price implied the firm was worth four times the value of its assets (book value, in the jargon). Nowadays, it trades at book value, implying that investors would do just as well to liquidate it. Morgan Stanley, in contrast, trades at 1.7 times book value. It is embarrassing enough to be outshone by an old rival. In the consumer-lending business, to be outdone by the guys in polyester suits is pure humiliation.

Stand on the east side of the top floor of Goldman's headquarters in lower Manhattan and you can look down on all of Wall Street. Despite the bank's recent stumbles, its employees continue to enjoy the commanding view. But hardly anyone is looking up to them any more. ■

State legislatures

Red meat and greet

DALLAS

Washington may be gridlocked, but state legislatures are cooking up new laws and spending priorities

When Winston Churchill said politics is not "a game" but "an earnest business", he had no hint of how politicians in Albany would make it so lucrative. During a special session before Christmas, lawmakers in New York state voted to approve a 29% pay rise for themselves. Kathy Hochul, New York's governor, signed the raise into law on December 31st. "I've been many times in their districts, and they work very hard, and they deserve it," she had said of her state representatives. Their annual salary of $142,000 now makes them the best-paid lawmakers in America.

State legislatures rarely get the hawk-eyed attention lavished on Congress, but they will be worth watching this year. Those in all 50 states will be back in session in 2023, with many returning to work this month. (Four states—Montana, Nebraska, North Dakota and Texas—have legislatures that meet only every other year.) These are good times for state lawmakers, and not only New York's money honeys. States are flush with cash. How their lawmakers choose to spend, and which new laws they push, will offer a lens on where the country is heading.

Three big themes will play out across state capitols this year. First is the continuing rise of hyper-polarised policies. Red and blue states will push further apart on voting laws, abortion, gay rights, education and taxation. One-party control has a lot to do with it. There are 39 "trifecta" states, in which a single party controls all three branches of government (both chambers of the legislature and the governor's office). This allows states to "make decisions and make them relatively quickly", says Peverill Squire of the University of Missouri, an expert on legislatures. "The contrast with Washington will be stark."

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Lawmakers in Wyoming recently proposed a bill banning the sale of all new electric vehicles starting in 2035, in order to protect the state's oil and gas industry. It was a riposte to regulations passed in California last year that aim to ban the sale of petrol-powered cars from 2035. The Wyoming bill died in committee, but it "served its purpose", which was to raise questions about the transition to renewable energy, says Brian Boner, a state senator who co-sponsored the bill.

Guns will be another battleground. California, which recently suffered three mass shootings in three days, already has strict gun laws. But new proposals are emerging, such as higher taxes on firearms and longer sentences for gun-related crimes. Some Republican states, such as Florida, are pushing in the opposite direction, and are likely to legalise the carrying of weapons without a permit or training. ("Permitless carry" is already legal in 25 states.)

A second theme will be governments taking aim at companies that defy state lawmakers' agendas. "The weaponisation of business is an emerging phenomenon," says Maggie Mick of MultiState, a government-relations firm. She points to proposals in Republican states, including Texas, that would revoke firms' tax incentives if they help employees get abortions.

Lawmakers in California, which already has the highest petrol prices in the continental United States, are mulling a cap on oil firms' profits. By contrast several states, including Arkansas, Missouri and South

Carolina, are proposing bills that would prohibit or punish firms that use environmental, social and governance (ESG) principles: corporate concepts that Republicans despise. How to treat TikTok, a popular Chinese-owned app, will be another topic of debate. Around half of states (mostly Republican ones) have already pushed for full or partial bans on state-owned devices running TikTok. Here, they are sprinting ahead of Congress because there is a "perceived vacuum at the national level", says Harry Broadman of Berkeley Research Group, a consulting firm.

A third theme to watch is how some governors will use these legislative sessions as résumé-building for higher office. This will be most obvious in Florida, where the governor, Ron DeSantis, is a leading contender for the Republican nomination for president. "There will be a lot of red-meat issues again, because this is his launching-pad year for 2024, and there are certain boxes he has to check," predicts Jeff Brandes, a Republican former Florida state senator. Mr Brandes says that "whatever the most extreme state is" in 2023 in terms of new conservative policies, Mr DeSantis will try to "match that". In addition to removing restrictions on guns, Mr DeSantis will try to tighten them on abortion and devise fresh torments for woke liberals.

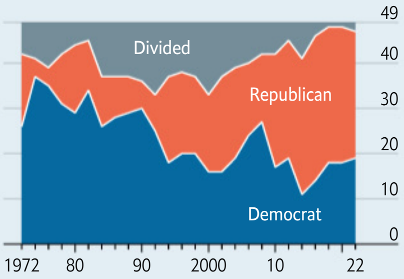
Meanwhile, Texas and other states may copy some of Mr DeSantis's signature policies, such as enacting restrictions on what students can be taught about sex and sexuality; doing that vaulted Mr DeSantis to the top of the news agenda last year (see next story). Other governors will use this legislative session to raise awareness of their political prowess. They include Glenn Youngkin of Virginia and Kristi Noem of South Dakota, both Republicans; and Gretchen Whitmer of Michigan and Gavin Newsom of California, two Democrats.

Mr Newsom and Mr DeSantis, who are shaping their states into embodiments of their competing ideas for America's future, are locked in a rivalry, real and rhetorical. During their respective inaugural addresses in January, Mr DeSantis used "freedom", his favourite word, a dozen times, while Mr Newsom uttered it 17 times. But the two governors mean very different things by it.

One-party rule

United States, control of state legislatures*

By party



*Excludes Nebraska's unicameral legislature

Source: National Conference of State Legislatures

Big states like California, Florida and Texas can be political weathervanes for the nation. But two smaller ones, Michigan and Minnesota, that became Democratic trifectas in 2022, will generate headlines too. If rumblings that Michigan is going to repeal its anti-union "right-to-work" law prove correct, it would be the first state to do so since 1965, says Chris Warshaw of George Washington University.

One way to think of the 2023 legislative sessions is as a long-running television drama. They can be viewed as a standalone episode, but will feature many of the same characters and issues from last time: abortion, rights for lesbian, gay, bisexual and transgender (LGBTQ) people, and culture-war debates on curriculums in public schools. Already 202 LGBTQ-related bills have been introduced; a record, according to the American Civil Liberties Union, an advocacy group. (Missouri, with 31, has the most, followed by Oklahoma's 27.)

Proposals include banning trans children from having surgery or anyone born male from taking part in girls' sports. There is talk of banning and even criminalising drag shows. According to Jason Sabo, a lobbyist in Austin, "The obsession with people's private parts is getting a little weird. Big Brother keeps on getting bigger and bigger, and for people who are anti-government, that is deeply ironic," he says.

More prosaic concerns, such as worker shortages, will also be discussed. States are contending with job vacancies and a lack of public-sector workers. Several, including Florida and Oklahoma, are proposing to raise teachers' pay. "At some of our state prisons we have over 50% vacancy rates", which is "untenable", says Robin Vos, Wisconsin's speaker of the house.

Luckily, many states are enjoying large surpluses, thanks to high tax receipts and federal money. Texas has a record surplus this year of $33bn, which the governor, Greg Abbott, has said he wants to use to cut property taxes. Indeed, tax cuts are on the agenda in many Republican states. California, facing a shortfall of around $20bn this year, is a notable exception to the bonanza, owing to its heavy reliance on personal-income tax, which is tied to the stockmarket's performance. It is one of eight Democratic states in which lawmakers are proposing a wealth tax on top earners, which risks provoking their flight.

Most legislatures would be wise to squirrel away some of their surplus for times of economic duress, says Justin Theal of Pew Charitable Trusts, which monitors states' fiscal health. But for politicians, saving has never generated as many headlines as raving. ■

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Colleges and free speech

Florida's woke wars

WASHINGTON, DC

Ron DeSantis wants to limit free speech in the name of freedom

STUDENTS THROWING frisbees on a lawn framed by charming historic buildings. Raucous parties filled with young people and debauchery. Students sitting in a circle debating controversial topics with a professor as their guide. For many these are the quintessential images of college life. Yet in Florida, one of these things may soon be illegal (and it's not the frat parties).

Florida's public colleges and universities have become the object of much government attention. The most disruptive is probably House Bill 7, more snappily known as the Individual Freedom Act, or the Stop Wrongs To Our Kids and Employees (Stop WOKE) Act. Signed by the governor, Ron DeSantis, last April, the law prevents training in or discussion of eight topics related to race and sex in particular. Specifically it prohibits the idea that "a person...bears personal responsibility for and must feel guilt, anguish, or other forms of psychological distress because of actions ...committed in the past by other members of the same race, colour, national origin, or sex," and that "such virtues as merit, excellence, hard work, fairness, neutrality, objectivity, and racial colour-blindness are racist or sexist," among other things.

Several organisations, including the American Civil Liberties Union and the Foundation for Individual Rights and Expression (FIRE), a pro-speech outfit, filed lawsuits challenging the law for violating the first and fourteenth amendments. The lawsuits have been successful. The provision pertaining to universities was blocked by a federal judge in November, but could still become law. The state has appealed the decision to the 11th circuit court of appeals. Mr DeSantis and his friends in the state legislature wanted the law to apply to companies too, though the courts blocked that in August. The law is still in effect for primary and secondary schools.

Despite being weakened, the Stop WOKE Act has had an effect on campuses. Twenty-eight presidents of public colleges signed a letter on January 18th promising to defend "Florida values". "Our institutions will not fund or support any institutional practice, policy, or academic requirement that compels belief in critical-race theory or related concepts such as intersectionality, or the idea that systems of oppression should be the primary lens through which teaching and learning are analysed and/or improved upon," the letter says.

Usually when people want to prevent an idea they dislike, they limit who can speak on campus, says Adam Steinbaugh, a lawyer at FIRE. (Liberals have been accused of using this practice against their conservative enemies recently.) But the Stop Woke Act is different. "Florida is skipping the pretext," Mr Steinbaugh says. "They're skipping the middleman and just limiting ideas themselves."

The law has created a culture of fear on campus, says a faculty member at the University of Florida, who wishes to remain anonymous. His university inbox is filled with emails about the act. Academics worry about accidentally breaking the law and being reported, he says. The University of South Florida, a different public university in Florida, has a website for students to report discrimination which specifically asks for "violations of House Bill 7." The consequences could be steep for public universities, which stand to lose millions of dollars in state funding.

This fear makes standard interactions difficult, the faculty member explains. One day in class, one of his students appeared withdrawn and was not participating in the group discussion. Instead of assuming that the student was simply having a bad day, he assumed the worst. "I was like oh my God, is this kid recording me? Is this kid a spy?" The faculty member says he is now seeking employment in another state, and he does not appear to be alone. A survey by the *Tampa Bay Times* shows that 63% of faculty say they will leave if they receive a comparable offer.

Perhaps this is the goal—to have lefty professors resign and decamp to California. But Mr Steinbaugh warns Florida's Republicans against overreaching. "The natural impulse of people is to try to censor their opponents," he explains. "But if you empower people…to limit speech, then that is a cudgel that your ideological opponents are going to wield against you." ■

The debt ceiling

Trillion-dollar chicken

WASHINGTON, DC

There is no easy escape from America's debt-ceiling mess

MOST GAMES of chicken do not have trillion-dollar stakes. America, when Republicans in Congress face off with a Democratic president over the debt ceiling, is exceptional. This legal limit on the amount of debt issued by the Treasury is periodically raised—but never by enough to avoid a repeated standoff. Without a bipartisan political deal to raise the ceiling America would be in dangerous territory, bumbling into pointless default.

On January 19th Janet Yellen, the treasury secretary, announced that the country had hit its maximum debt (of $31.381trn) and that she had begun taking "extraordinary measures"—accounting tricks such as deferring pension investments to conserve cash. These measures, which have become routine, buy several months before the calamity actually arrives, called the "x-date". The last close call, in 2011 when Barack Obama was president and Joe Biden was vice-president, was resolved with only days to spare, spooking stockmarkets and leading one rating agency to downgrade the federal government's credit. The impasse of 2023 may well be just as dramatic.

Republicans, who have newly taken control of the House of Representatives, say that they cannot abide runaway spending and must rein it in. This deep concern is episodic. When Donald Trump was president, the debt ceiling was increased three times with Republican support, and the national debt rose by $8trn over his term ($3.2trn of which came before covid-induced spending began in 2020). Those increases were not particularly contentious, and the White House wishes the same for this one. "Raising the debt ceiling is not a negotiation; it is an obligation of this country and its leaders to avoid economic chaos," Mr Biden's press secretary said in a statement released on January 20th.

But it may not be so simple. Republicans are unlikely to let their leverage over Mr Biden lapse. Kevin McCarthy squeaked into his position as speaker of the House by promising many concessions to hardliners, including pledging extreme brinkmanship over the debt ceiling. Mr McCarthy has vowed to secure spending cuts in exchange for raising the debt limit, and pledged to put the country on the path to a balanced budget in a decade. As part of his bargain to attain power, the speaker also had to allow a parliamentary manoeuvre that would make his own removal easier. Mr McCarthy may not be able to keep his promises, in which case his own party could end his speakership in its first year.

This is forcing financiers, lawyers and officials to focus on the unthinkable. The starting point of such contingency planning is that a sovereign default would be cataclysmic: stocks would plunge, borrowing costs would soar, growth would suffer and the dollar's status as the world's dominant currency would be shaken. Any way to avoid this series of disasters merits attention. The problem, unfortunately, is that each proposed workaround has severe—possibly unworkable—drawbacks.

Start with magical thinking. By law the

Treasury is allowed to mint platinum coins for commemorative purposes in any denomination. One, possibly satirical, suggestion is to mint a $1trn platinum coin and deposit it at the Federal Reserve. The Fed would then credit the Treasury's account, thereby allowing it to go about its business unconstrained by the debt ceiling—and Americans would live happily ever after. The #MintTheCoin movement, as it is known on social media, has gathered support from some lawmakers on the left of the Democratic Party. Most serious thinkers, including Ms Yellen, have dismissed it as a gimmick. That is because the economic implications would be disturbing. It would amount to the monetisation of debt: the Fed would be directly funding the government. And what would stop future administrations from minting yet more coins to pay for their pet initiatives, whether cash handouts or tax cuts? It would be a recipe for fiscal recklessness and, ultimately, untethered inflation.

A second suggestion, which seems almost equally crazy, would be for the Treasury to issue ultra-high-interest bonds. Because only the face value of bonds counts toward the debt limit, the Treasury could, in theory, sell $1bn-worth of one-year bonds with an interest rate of 105% for twice their face value (since the prevailing market rate is closer to 5%). That would allow the Treasury to raise $2bn of funding but add only $1bn to the national debt. Although clever, such chicanery would suggest that the political underpinnings of the American economy are wobbly, an unsettling prospect for markets.

A final proposed workaround is more legalistic. Some argue that a usually ignored provision of the 14th Amendment to the constitution provides a solution to the debt impasse. In one section it states that the validity of American public debt "shall not be questioned". That sounds simple enough: Treasury can just issue bonds in defiance of the debt ceiling. But opponents would challenge that interpretation, setting up a case that would almost certainly wend its way to the Supreme Court. The sword of Damocles would still be there, but wielded by the nine justices. An adverse ruling would mean that all the bonds issued in defiance of the debt ceiling could be deemed invalid, suddenly cutting off the Treasury from borrowing and setting it up for a giant battle with investors holding now-worthless paper.

The mere possibility of such a ruling would probably spook investors. The same can be said for the platinum coin and high-interest bonds: doubts about their legality would render them even less effective as workarounds. "None of these ideas is going to evoke enough confidence for markets to stay calm," says Maya MacGuineas of the Committee for a Responsible Federal Budget, a think-tank. "If any of those were actually viable, we would have pulled the chute on any one of them in 2011," says Rohit Kumar of PWC, an accounting firm, who served as a Republican Senate aide during the debt-ceiling debacle a decade ago.

Some argue, optimistically, that the government could break through the debt ceiling in an orderly fashion. The Treasury could give priority to critical payments, to bondholders and to essential programmes like Medicare, and thus stave off sovereign default. But solvency is not like quantum mechanics: you can't be in two states of the world at once. Foreign investors would still have to confront the reality that America was no longer meeting obligations to its citizens. Markets would have to confront the economic damage: tax revenues cover only about four-fifths of government spending. Abruptly halting the other fifth would be akin to ripping out 5% of GDP overnight, putting America on course for a crushing recession.

That suggests that the only way through is a bruising political negotiation. There is no way to improve America's fiscal trajectory without restructuring its entitlement programmes, which some Republicans are keen on and Democrats will never accept. The result may be that the kind of self-imposed austerity that plagued the Obama years makes a comeback. At the moment, neither side has any incentive to back down. Impending market cataclysm might be the only motivating factor, though it will not arrive for several months. Trillion-dollar chicken has a while yet to go. ■

Work

Footloose

NEW YORK

A shortage creates opportunities for nurses with wheels

DESPITE THE obvious risks, nurses from all over America flocked to New York when the city was first afflicted by covid in 2020. As the various waves washed over America, the need for travel nurses grew as other states were hit hard too. Demand for travelling nurses has dipped a bit since, but it remains much higher than it was before the pandemic. Spending on travel nurses is five times what it was in 2019.

According to the American Hospital Association, hospitals spent a median of 40% of their nurse-labour expenses on travel nurses in January 2022, compared with just 5% in January 2019. Barry Asin of Staffing Industry Analysts says the travel nurse increase is the biggest change in staffing he has seen in his two decades of research. The future of travel nurses is one of the biggest questions the health industry is facing says John August, director of healthcare labour relations at Cornell's School of Industrial and Labour Relations. It is also a wonderful opportunity for nurses with wheels.

Travel nurses are paid much more than staff nurses doing the same job at the same hospital, to offset the inconvenience of leaving home. Nora Cruz, for instance, is based in Florida, but is currently working in Iowa. The entire medical facility there is

Have stethoscope, will travel

manned by travellers, she says. Before covid, many adventurous types were drawn to travel nursing, happy to stay a few weeks or months in a different city or state and move on. One intensive care nurse interviewed for this story likes to work in Denver hospitals in the winter so he can ski.

The pandemic changed things. Wages rose, in part to compensate for conditions that were suddenly more hazardous. Thanks in part to federal covid relief funding, travel-nurse staffing agencies increased the hourly rates they charged to hospitals by more than 200%. At peak demand, some travel nurses earned as much as $10,000 a week. Wages have come down since then, but they are still high. According to Vivian Health, the average weekly salary for a travel nurse in South Dakota is nearly three times higher than the staff nurse's average weekly salary of $1,164.

But within the set of travelling nurses, there is a hard-boiled subset that makes even more money. About 100,000 nurses left bedside care in 2021. Burnt out from the punishing nature of covid-care, many staff nurses retired. Others opted for less stressful jobs, such as a school nurse or working for insurance companies. Nurses still on the job are fed up. They felt under-appreciated by hospitals. Tony Braswell, head of Gale, a staffing agency, says they are not just burnt out, they are broken. They have been frustrated by pay as well as increasing patient nurse-ratios.

As a result, earlier this month 7,000 nurses in two New York City hospitals went on strike for three days. Darla Joiner, a nurse who served on the union grievance committee, says she nearly became a travel nurse last year, after six of her colleagues resigned. Before the strike, she said to herself, "I'm just so upset right now I can't keep working like this. We've been working very understaffed for a long time." This too creates an opportunity. Enter the strike nurses, who are among the best paid, making thousands of dollars a day.

Ms Cruz, in Iowa via Florida, became a travel nurse last year. She was drawn to the flexibility as well as the money. She likes to have control of her schedule. But she has four children under five that she leaves behind in Florida. Finding accommodation for short stints is not easy either. Sometimes landlords jack up the rent when they find out she is a travel nurse. She mostly lives in an RV when she is on assignment.

More hospitals, feeling labour costs pinch, are outsourcing recruitment and payroll. The staffing agencies, meanwhile, are getting savvier with technology. Aya Healthcare has created an Uber-like platform for nurses and hospitals to connect footloose workers with work. Tech staffing firms have also started to place travel nurses. Nursing, in other words, is becoming part of the gig economy. ■

Police reform

Cop city

ATLANTA

A forest, a fatal shooting and a police car up in flames

IT WAS A familiar scene. On January 21st hundreds of protesters holding "defund the police" signs flooded Atlanta's Peachtree Street. Windows were smashed and a police car was torched. Like so many times before the outcry was over a police killing. A 26-year-old was gunned down by a cop last week. But this time the story was different. The victim was shot protesting against a city initiative enacted in response to the Black Lives Matter marches.

Amid demands for police reform, Atlanta's city council approved $30m for a new police training facility in September 2021. The centre would teach cops to be, "rooted in respect and regard for the communities they serve". It would include a shooting range and a mock city. But environmentalists objected, since the complex was to be built on 85 acres of woodlands, in an area known as the South River Forest. The mostly undeveloped site—dubbed "cop city" by opponents—became fertile ground for civil unrest.

The "forest defenders", a band of climate activists, have spent the past year living in the South River trees. Police have tried to extract them using rubber bullets and tear gas. Then on January 18th the Georgia Bureau of Investigation reported that Manuel Terán, a non-binary medic known as "Tortuguita" (Spanish for "little turtle"), opened fire on a state trooper as police cleared the encampments. Cops shot back, killing the activist. But there is no footage of the incident—troopers were not wearing body cameras. Activists are calling it "cold-blooded murder". Reporters who spent time with Tortuguita earlier in the year noted a commitment to peaceful protest. "We're not going to beat them at violence," Tortuguita told the *Bitter Southerner*, a local paper. "They're very, very good at violence". But for a supposedly irenic group the forest defenders had lots of weapons: cops confiscated fireworks, blades, air rifles and a handgun that belonged to Tortuguita in the raid.

STOP
COP CITY

Fulton, prison, blues

Soon environmental battles in the woods morphed into anti-police protests downtown. Activists on the streets objected to investing in the police force, especially after the killing. The storefronts that were smashed belonged to companies like Wells Fargo that had pledged funds to cop city. "They have blood on their hands," says Nolan Huber-Rhoades, an organiser affiliated with the forest defenders, "many of the activists think breaking their windows is more than appropriate". Six protesters were arrested for arson, criminal damage and domestic terrorism.

Some key players are out-of-towners: Tortuguita was from Tallahassee and only one of the protesters arrested is from Georgia. They do not necessarily represent local feeling. "The average black person in Atlanta said 'fuck the police, but don't defund it'," says King Williams, a local black filmmaker who is involved in the debates. The training facility was first proposed by a black councilwoman, who saw the need to fix chronic under-policing in poor neighbourhoods. When officers began calling in sick en-masse in June 2020—a phenomenon known as the "blue flu"—the force became depleted. Many Atlantans wanted more (and better) policing, not less.

The training facility would help with that. But its location brought problems, even for the council. Lawmakers vowed to plant 100 hardwood trees for each one cut down. The bill passed in a 10-4 vote after 17 hours of public comments—most of which were against the plan. The councilwoman who proposed the facility lost her election to a younger candidate who opposed it.

Despite the resistance since, plans have not changed. Many politicians still support the facility. "Anyone who wants a safe street should want a well-trained police officer," says Amir Farokhi, a city council member for the progressive 2nd district. Mr Williams suspects media attention will expedite construction—he reckons bulldozers will soon take to the forest.

On the way out of the South River Forest on a recent afternoon your correspondent came across a group of ten people dressed in camouflage suits and balaclavas. They nodded hello to Mr Huber-Rhoades, the organiser, as they headed deeper into the woods. "New people moving in, I guess," he said with a smile. ■

Lexington | What Edward Hopper saw

An exhibition of his paintings in New York reveals timeless insight into the city and its people

EDWARD HOPPER must have been desperate to turn for help to Robert Moses, of all people. It was 1947 and Mr Hopper, his reputation as one of America's great realist painters by then secure, was facing eviction with his wife, Josephine, from their apartment on Washington Square, in New York's Greenwich Village.

Moses, New York's master builder, had been trying for years to ram a wide road through the square, yet Hopper hoped to enlist him in a campaign to block New York University from pursuing its own development goals by buying his building and others.

No public official could get involved "even if he agreed with your point of view," Moses replied, adding, in case he had been too oblique: "Personally, I don't agree with it at all."

This exchange of letters, alongside others Hopper wrote resisting development of Washington Square, comes as a shock to the visitor wandering through "Edward Hopper's New York" at the Whitney Museum of American Art, in Manhattan's Meatpacking District. To encounter the author's plain-spoken voice in strenuous argument is to appreciate anew its subtlety, if not its absence, in the paintings themselves. Hopper's artistic perspective is always clear, if uncanny, but his intellectual point of view is enigmatic. What does he believe, what messages is he trying to send?

There is so much missing from the scores of sketches, etchings and paintings in this exhibition, which covers the six decades, from 1908 to 1967, that Hopper made the city his home. Where are the convulsions of history—the two world wars, the Great Depression, the labour strikes, the civil rights movement, the ticker-tape parades? Where, for that matter, is the Empire State Building or the Brooklyn Bridge, or any of the city's celebrated landmarks? Where are all the people?

Hopper gives us instead, in "The City" (1927), a view of his beloved Washington Square that includes his block of town houses but also imagined buildings of various styles. Is he bemoaning any change, or is he celebrating the ad hoc, vibrant version of it so characteristic of New York? In "Early Sunday Morning" (1930), he presents a deserted streetscape of two-story buildings, low yellow light drawing long shadows from a fireplug and a candy-striped barber pole. Does that grey rectangle looming in the upper-right corner signal disapproval of the skyscrapers rising in Manhattan?

Again and again, he shows us solitude: A woman sits alone in "The Automat" (1927), framed by lights reflected in the window behind her as she stares at the coffee cup she holds; an usher in "New York Movie" (1939) ignores the film as, haloed by a sconce, she cradles her chin in one hand and silently contemplates a story of her own; a man in shirtsleeves sits at his sunlit desk in "Office in a Small City" (1953), gazing at a water tower and chimneys across the way. What are they thinking? Are they lonely and alienated, as many viewers infer? Or is their experience more grand and romantic? Are they imagining, reflecting, envisioning a future?

Hopper was a taciturn man. He was known to sit silently in Washington Square Park as he thought through a painting. "Sometimes talking with Eddie is just like dropping a stone in a well," Josephine said, "except it doesn't thump when it hits bottom." Hopper resisted explaining his work, insisting "the whole answer is there on the canvas". He would ride the elevated subways—today mostly submerged—prizing his glimpses down at sidewalk life and through backlit windows into the city's infinite intimate tales.

"The inner life of a human being is a vast and varied realm", Hopper wrote in "Reality: A Journal of Artists' Opinions," which he helped found in 1953 to protest against the growing dominance of Abstract Expressionism. In a joint statement, Hopper and his confederates objected to the art world's mania for "the excitation of texture and colour" and the "ritual jargon" that went with it, which were creating "an atmosphere of irresponsibility, snobbery and ignorance." Texture and colour, along with other elements of painting, were rightly understood as "only the means to a larger end, which is the depiction of man and his world".

Hopper's own ambition, he wrote in his private journal, was to create "a realistic art from which fantasy can grow". That he achieved his goal may account for the crowds packing the exhibition and turning its sold-out catalogue into "one of the hottest gifts in town", in the words of the *New York Post*.

The billion-footed beast

Like many institutions, museums are struggling to address the politics of the moment, mounting exhibitions that declare where society went wrong and how it might yet get things right. What the visitor to the Whitney senses instead is something quieter, something timeless and universal by way of being as ephemeral and particular as a shaft of sunlight on a woman's face: Hopper's respect for the uniqueness of his subjects and of his audience, for the vast and varied realm within each. Jostled by the crowd as they stand before Hopper's works, viewers are free to puzzle out for themselves whether they are grasping his meaning about place and person, or arriving at their own.

Would Hopper be happy to know that, though NYU did take over his building, it preserved his top-floor studio? He would no doubt be relieved that Jane Jacobs, the urban theorist and activist, stymied Moses in bulldozing an expressway through Greenwich Village. (He might be less pleased that zoning has made the Village an ossified idea of urban life struggling artists cannot afford.)

One wonders what he would make of the glass-and-steel tower that is the Whitney itself, amid the extravagant jumble of the Meatpacking District. The area has changed so much this century. Yet that is thanks to the High Line, the park developed from an old elevated train track, terminating at the Whitney. It helps millions of people each year see life as Hopper did, at an odd angle and on a human scale, identifying their own New York as they enact their unique dramas within the ever-changing city. ■

Brazil's economy

Ready for relaunch?

As Lula takes over again, Brazil's economic prospects are looking up

AT FIRST glance Lula's second presidential act looks badly timed. In 2002 Luiz Inácio Lula da Silva inherited an economy that had just been subjected to wrenching reforms. Lula governed capably, but was bolstered by friendly global forces: soaring demand for Brazil's commodity exports, low global interest rates and a sagging dollar. He left office in 2010, having presided over average annual growth of 4.5%, a 50% increase in average Brazilian incomes, and a hefty drop in unemployment, poverty and government debt.

Yet during last year's election campaign, few thought Lula's second stint as president would be as lucky. He inherits an economy hardly richer than the one he bequeathed his successor, Dilma Rousseff (see chart 1 on next page). Under her, the country plunged into a deep recession; her impeachment over a corruption scandal tarnished Lula's Workers' Party (PT). The economy still bears the scars of the pandemic, which killed nearly 1m Brazilians and knocked 4% off GDP. Gross government debt now stands at 88% of GDP—an eye-watering level for an emerging market with a history of macroeconomic crises—while inflation is well above the central bank's target. Most disconcertingly, he takes the reins of a country which suffered serious damage to its environment and its democratic institutions under Jair Bolsonaro, his Trumpish predecessor, whose supporters stormed government buildings in the capital, Brasília, in early January.

So Lula does indeed have his work cut out. Brazil sorely needs investment in its infrastructure, as well as spending on education to train Brazilian workers for better jobs and to make up for learning lost during the pandemic. The Amazon rainforest, the health of which depends on efforts to strengthen and enforce rules against deforestation, will require more spending. So will poverty; it soared during the pandemic, after falling for much of the 2010s. Enacting policies to meet these needs means not only maintaining unity in the congressional coalition led by the PT, but also mastering difficult budget arithmetic.

This year's spending plans threatened to exceed a cap on annual budget growth introduced in 2016. To dodge this potential obstacle, Lula helped shepherd a constitutional amendment through Congress in December, before his inauguration, exempting some spending from the cap. But this carries its own risk: of eroding investors' trust in Brazil's commitment to sound budgeting. Recognising this, Lula's administration has outlined a plan to boost tax revenues and trim spending. But achieving budget reform will prove a legislative challenge. Brazil thus remains vulnerable if investor sentiment is dented by poor growth, a gloomier global economic prognosis or some other shock.

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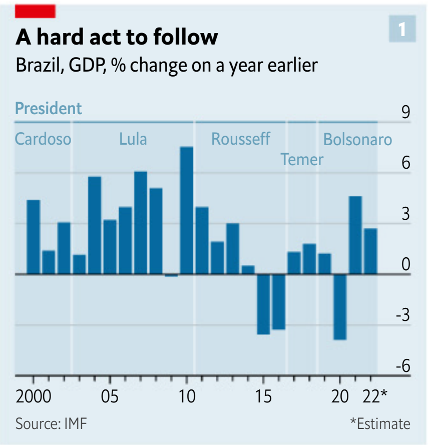
And on those counts, too, it has looked a bad time for Lula to retake the presidency. This year has seemed destined to be a hard one for much of the global economy, as many countries pushed up interest rates to combat high inflation, and as China's economy continued to sputter under a property-market crash and harsh covid restrictions. Even recently, many economists were warning that a global recession might be coming. The combination of weak global growth, sinking commodity prices and rising interest rates could easily tip Brazil into crisis.

Yet only a few weeks into Lula's term, his timing does not look so hapless after all. In much of the world inflation rates are falling, often faster than forecast just a few months ago. The global economy looks more resilient, too. Neither America nor Europe is in recession yet, and although China's economic growth in 2022 disappointed at just 3%, the relaxation of its zero-covid policy and of curbs on property-market investment may presage a rebound. Officials at the IMF have suggested that new forecasts to be released at the end of January will show an upward revision to global growth.

These better prospects seem to set a floor for commodity prices. High prices for oil, soyabeans and other Brazilian exports help explain growth over the past two years that was faster than many might think. GDP rose by nearly 5% in 2021, and by almost 3% in 2022. Commodity prices have fallen from the peaks reached in the months following Russia's invasion of Ukraine, but remain well above pre-pandemic levels. High prices could persist, too, if global demand rises, while supply disruptions—from war, climate change and a fracturing of the global trading system—continue. Brazil is well-placed to benefit; in addition to oil and soyabeans, it has helped fill the shortfall caused by reduced shipments of maize from Ukraine, becoming one of the world's leading exporters.

Meanwhile, lower expectations for inflation across the rich world, and in the United States especially, mean that interest rates are unlikely to climb as much as feared this year, and have contributed to a decline in the value of the dollar. That has eased pressure on economies around the world, including Brazil, where the yield on ten-year bonds initially dropped by nearly a full percentage point. Brazilian inflation has fallen too, from a peak rate last year of more than 12% to just 5.8% in December (see chart 2).

That is still well above the central bank's target rate for 2023 of 3.25%, and core inflation, excluding more volatile items, has eased more slowly. But declines in Brazilian inflation, combined with easier financial conditions globally, may eventually allow Brazil's central bank to cut its policy rate, painfully high at 13.75%. The central bank's aggressive rate-rise campaign, which began in 2021, helped restrain inflation and maintain markets' confidence. But high rates have raised the government's borrowing costs and dampened what might otherwise, in a period of buoyant commodity prices, have been a pick-up in investment.



A hard act to follow

Brazil, GDP, % change on a year earlier

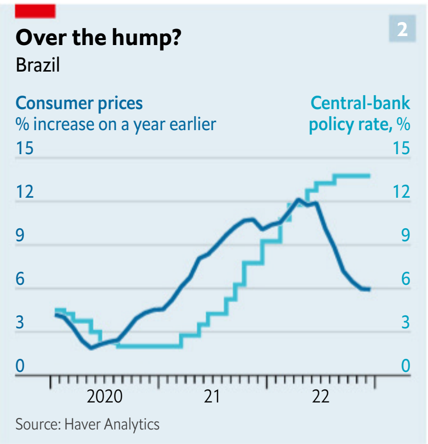
Source: IMF

*Estimate

Healthy demand for commodities and more benign financial conditions help. But they do little to fix underlying structural problems. Brazil's economy needs more sweeping reform. The new government, however, has conceded that it will have to be more careful than it might have been, to avoid further political unrest. A push to reduce trade barriers offers scope for progress and might prove especially beneficial, given global interest in supply-chain diversification. An agreement between the European Union and Mercosur, a trade bloc of large South American economies, which has been held up by European concerns over Amazon deforestation, might be revived now Mr Bolsonaro is gone. But serious reform would require a big push by Lula, who seems to have other priorities—although in a joint article on January 22nd he and Alberto Fernández, Argentina's president, promised deeper economic integration, including work towards a common currency (see Finance section).

Nor does the turn in global fortunes make Lula's second presidency an easy one. Current forecasts suggest that Brazil's economy will grow by just 1% in 2023, so even a dazzling outperformance of projections would compare modestly with the average during Lula's first.

It is also easier to see how things might go wrong in the near future than it was in the 2000s, because of unanticipated shocks to the global economy or domestic troubles. Lula may well come to rue his decision to try his hand at governing once more. But it is also getting easier to see how he might further burnish his reputation for uncannily good timing. ■



Over the hump?

Brazil

Source: Haver Analytics

US-Mexico relations

El Chapo: the sequel

MEXICO CITY

A trial in New York exposes US-Mexican counter-narcotics tensions

EVEN A MEXICAN *telenovela* would struggle to come up with a better second season. In 2019 a court in New York sentenced to life in prison Joaquín Guzmán (better known as "El Chapo"), a leading drug trafficker who headed the Sinaloa gang. This week in the same room sat Genaro García Luna, who was the federal security minister during President Felipe Calderón's "war on drugs" between 2006 and 2012 and a lauded ally of the United States. He was arrested in Texas in 2019, and the following year pled not guilty to five charges, including one of conspiracy to distribute cocaine.

The trial is a reminder of a basic lack of trust that has long dogged the United States and Mexico in tackling the drugs trade and the criminal groups running it. "All the Americans' Mexican counterparts at one time or another have been suspected of being in cahoots with the criminals," says Andrés Rozental, a former Mexican diplomat. The paradox is that Mr García Luna was in office at a time when the joint fight against drugs was in its heyday. Today the biggest obstacle to security co-operation is not concern about official corruption, but the policies of Mexico's president, Andrés Manuel López Obrador.

Co-operation marked by friction is not unusual. The United States partly blames Mexico for its rising toll of deaths from drug overdoses. In 2021 66% of these were from fentanyl, which since 2019 has mainly entered the country from Mexico (rather than China). Mexico in turn attributes the violence it suffers to the demand for narcotics north of the border (and the guns that flow south). But during the Calderón years, "the doors opened completely to the Americans," says Eduardo Guerrero, a Mexican security analyst. Security agencies co-operated closely and still did so under the next president, Enrique Peña Nieto. Between 2008 and 2021 the US Congress authorised $3.5bn for spending on security assistance to Mexico, ranging from buying helicopters to strengthening institutions.

Mr López Obrador came to power in 2018 pledging to tackle the root causes of crime rather than the symptoms. In practice that has largely meant standing by as criminal groups went about their business. Mr López Obrador ripped up the framework for co-operation, alleging it entailed a level of foreign involvement that violated Mexican sovereignty. Then the arrest by the United States in October 2020 of Salva-

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dor Cienfuegos, a former Mexican defence minister, on charges similar to those faced by Mr García Luna, made co-operation even more minimal. The Mexicans were so angry at his capture—partly because they were not informed in advance—that America feared the damage to bilateral ties and in 2021 returned Mr Cienfuegos to Mexico.

In response, Mr López Obrador passed a national-security law, aimed at the Drug Enforcement Administration (DEA), forcing foreign agents to share intelligence with their Mexican counterparts. In his hostility to the American approach, he may have had a point. The two countries' calculations can differ. Mr Calderón's policy, backed by the United States, of targeting kingpins led to more violence as the gangs fragmented and multiplied. The annual number of murders tripled between 2007 and 2011 and remains more than 30,000.

For all the ill-will, some institutions, such as the two navies, have continued to share intelligence. And the national-security law is more a threat on paper than actually applied. A new agreement on security co-operation was reached in late 2021, keeping relations ticking over, but more at arm's length.

Moreover, in recent months Mr López Obrador appears to be changing tack and embracing more co-operation, perhaps because of pressure both from abroad and at home, where he is seen as weak on tackling crime. Mr Guerrero calculates that between 2021 and 2022 the number of drug-gang members detained rose by 28%, almost certainly thanks to intelligence from the United States. Last year Mexico captured Rafael Caro Quintero, a drug baron accused of the murder in 1985 of a DEA agent. In January it recaptured Ovidio Guzmán, a son of El Chapo (who was first detained in 2019 but released on Mr López Obrador's orders after gunmen took to the streets). Mr López Obrador has long railed against soldiers being on the streets, but last year got Congress to prolong the role of the army in public security until 2028.

Still, Mr López Obrador has put a dampener on co-operation with the gringos. He replaced the federal police with the National Guard, which is poorly vetted and little trusted. Mexico is dragging its feet on extraditing people, including the younger Mr Guzmán, to the United States. The attorney-general is compromised by being close to the president. Visits by the president to El Chapo's hometown have raised eyebrows, as an implicit sign of sympathy for him. Mr García Luna's trial could be yet another blow to the US-Mexico relationship. Alejandro Hope, a Mexican security analyst, describes it as "a double-edged sword". "It sends the message that impunity will not be tolerated, but also that however much you do for us [the United States] you're vulnerable." ■

Argentine music

Middle-income trap

BUENOS AIRES

A new generation of Argentine musicians is topping the charts

GERARD PIQUÉ was one of Spain's most talented footballers. On January 11th his ex-partner, Shakira, a Colombian singer, made him better-known for infidelity than ball-control. "I'm worth two 22-year-olds," blasts a new song that takes aim at Mr Piqué and his younger lover. "You traded a Ferrari for a [Renault] Twingo, swapped a Rolex for a Casio." The gym-honed Mr Piqué should "work his brain a little bit too".

On YouTube, a video-streaming platform, the superstar's song broke records, reaching 100m views in only three days. The producer behind her, Gonzalo Julián Conde, is also topping charts. The 24-year-old Argentine DJ, known by his stage name, Bizarrap, has amassed more than 6bn views on YouTube since 2017.

This hit is a pop song. But he is the most successful of a group of young Argentines finding global fame in the genre known as "trap". A cousin of hip-hop, this emerged in Atlanta in the 1990s and was popularised by artists from crime-ridden neighbourhoods—the name alludes to "trap houses", where drugs are sold. It has swept the hemisphere, and "freestyle" (improvised) rap concerts became very popular in Buenos Aires in the mid-2010s. It helped that the government provided a free laptop to every student at public secondary schools, allowing them to record their first tracks, even if exam results were no better.

The undisputed king of Latin trap is from Puerto Rico: Bad Bunny, the most-streamed artist for three years in a row on Spotify, the world's biggest music-streaming platform. But Argentina is catching up. Its singers tend to be younger, and many of them are women, says Leila Cobo, the chief content officer for Latin music at *Billboard*, an American music magazine. Bizarrap is an exception: it is often women—particularly María Becerra and Nicki Nicole, both 22—who have gained fame abroad.

Argentina's musical rise is part of a broader globalisation of Latin music. In 2016 none of the top 50 most-played tracks on Spotify was in Spanish. Last year, 14 were. In 2021 the recorded-music market grew by 31% in Latin America, far above the global average of 18.5%. According to GWI, a market-research firm, Latin Americans lead the world in the average time spent streaming songs—almost two hours a day.

Unlike their tough American counterparts, many Argentine trap artists are middle-class. Lyrics focus less on drugs and violence; more on bonking, brands and bottoms. "I'm a nasty girl, fantastic/This bum is natural, no plastic," boasts Nathy Peluso, an Argentine singer, in a song with Bizarrap. An analysis of 692 songs by the 20 biggest Argentine trap artists showed that the most-mentioned names were Lionel Messi, a footballer, God and Robin Hood—and brands like Nike and Ferrari. Like Mr Piqué, brands, too, may soon find that Argentine artists make or mar their reputations. ■

Shakira piqued; Piqué shaken

India's opposition

Relaunching Rahul Gandhi, again

GANUSPUR, PUNJAB TO INDORA, HIMACHAL PRADESH

Do Indians still want the Congress party's secular politics?

WALK THROUGH the Indian countryside alongside Rahul Gandhi for a while and it is possible to imagine you are witnessing the rebirth of a political movement. Traversing the northern state of Himachal Pradesh one wintry day last week the leader of Congress, India's main opposition party, was heralded in every town and village. Scores of people jostled for space behind windows and on rooftops, brandishing phones and occasionally tablets to record a glimpse of him. Sporting a white T-shirt and bushy beard, Mr Gandhi trudged inside a rectangular security cordon formed by police wearing tracksuits and carrying a yellow rope. Every few minutes the caravan stopped and security guards hustled bystanders inside the cordon for a photo-op and brief chat.

The "Bharat Jodo Yatra" (roughly "unite India march") is an effort to boost Congress and its leader ahead of the general election due next year. Both badly need it. Congress, which as recently as 2009 won twice as many seats as its Hindu nationalist opponent, the Bharatiya Janata Party (BJP), risks becoming an electoral irrelevance. It controls just three of India's 28 states and less than 10% of seats in the lower house of parliament. The BJP has 16 states, 56% of lower house seats—and in Narendra Modi, the prime minister, by far India's most popular leader. He is the preferred prime minister of over 60% of Indians; half as many would pick Mr Gandhi.

A scion of Congress' ruling dynasty—a son, grandson and great-grandson of prime ministers—he began his walk at India's southern tip last September. By the time it concludes in Kashmir on January 30th he will have covered over 2,200 miles. Even by India's tradition of political marches, this is a sterling effort. Mohandas Gandhi (no relation) walked 240 miles on his Salt March of 1930, a seminal act of civil disobedience; a previous BJP leader completed a similar route to Mr Gandhi in 1991 by car. At the helm of Congress for over a decade, as party president and, as currently, de facto leader, the 52-year-old Mr Gandhi has faced a suspicion that his heart is not in the family business. A modest uptick in his ratings suggests his exertions are helping to allay it. "He had this image of not being committed. This was a pretty visible way of overcoming that," says Pratap Bhanu Mehta, a political scientist.

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Yet even if Mr Gandhi is a better politician than many Indians believe, he could not reverse Congress's fortunes alone. Several failed attempts to boost the party by promoting its princeling leader have already proved that. Rather, Congress, a squabbling left-leaning coalition arraigned around its ruling family, needs to re-establish what it stands for. "We vacated the space of ideology, first to the left, then to the right," says Jairam Ramesh, a veteran Congress leader from Karnataka who has walked with Mr Gandhi throughout. One aim of the *yatra*, say Mr Gandhi and his acolytes, is to refresh Congress ideologically by reasserting its secular values.

They describe the *yatra* as an effort to promote love and unity against the hatred and division fostered by Mr Modi's Muslim-bashing party. This recalls the principles of Mr Gandhi's great-grandfather, Jawaharlal Nehru, India's first prime minister. He and his supporters did not seek to banish religion from public life, as secularists in France had. Yet they saw the prioritising of one religious group over another as a guarantee of conflict in a diverse country with a history of religious, especially Hindu-Muslim, violence. For them, secular liberal institutions, including the legal system and bureaucracy, represented the country's best hope of holding together.

Over the past three decades, and especially since Mr Modi won power in 2014, the BJP has eroded that legacy. First propelled to national power in the 1990s by communal rioting that its leaders had helped provoke, the BJP considers India a Hindu country for too long suborned to its religious, primarily Muslim, minorities.

Rallying Hindus against the other 20% of India's population has helped paper over deep differences of caste and class within the majority group. It has also been so successful in redefining Indian nationalism as a Hindu cause that the BJP is able to deride its secular critics as unpatriotic. For many Indians, secularism and anti-Indianism have become, if not synonymous, then related. "Plenty of Hindus are now unwilling to consider secularism a good thing," says Christophe Jaffrelot of Sciences Po in Paris. "The opposition will have to recreate the appetite for it."

Mr Gandhi appears to be trying to do so by reaching beyond his atheist grandfather to the interfaith harmony preached by Mohandas Gandhi. He has walked parts of the *yatra* (a word that usually refers to a pilgrimage) in bare feet and often wearing a *tilak*, a red mark connoting Hindu piety. He has referred to the Bhagavad Gita, a Hindu text, in presenting the *yatra* as a *tapasya*, or penance. Yet he has stressed religious inclusion. After the *yatra* entered the state of Punjab, he donned a turban to pay his respects at the Golden Temple in Amritsar, the spiritual centre of Sikhism.

He could be on to something. Surveys of young middle-class adults, a BJP constituency, suggest they are less Islamophobic than their parents. Moreover, if there is a better way for Mr Gandhi to present Congress as an alternative to the Hindu nationalists, it is not obvious. Despite Mr Modi's pro-business and Congress's pro-poor rhetoric, the two parties espouse broadly similar economic and social policies. But if Mr Gandhi may sense an opportunity, his heart-warming campaigning is nothing like an ideological counterweight to Mr Modi's message of Hindu pride. Reviving secularism would require an alternative stance on divisive issues that have become vote winners for the BJP, such as uniform civil laws for minorities and interpretations of history, says Mr Mehta. "Saving secular pluralism from the charge of being anti-Hindu means giving a secular answer to communal issues. You need to explain what institutional measures you will take. It's not enough to say 'we're secular'."

If it is to revive demand for a large secular party, Congress will have to meet that challenge. There is currently no sign it is planning to. In theory, it could continue to languish. Indeed, the combined vote-share of the two big parties looks remarkably stable, at around 50% since the 1980s. They have simply switched positions. In 1991 Congress won 36% of the vote and the BJP 20%; in 2019, the BJP won 37% of the vote and Congress just under 20%. Yet this could change. The BJP was sustained in opposition by its cadre of deeply ideological activists. Congress, having no comparable ideology or foot-soldiers, could fizzle.

Half an hour after the *yatra* passed through Ganuspur in Punjab, its only remaining traces were a lorry laden with cardboard cut-outs of Mr Gandhi and policemen grumpily clearing away barricades. To secure the future of his party, and secular liberalism in India, Mr Gandhi will have to convince Indians that his trek through their towns and villages amounted to rather more than meets the eye. ■

Corruption in the Philippines

May the force be without you

MANILA

Bongbong Marcos rewires the drugs war

When he became president of the Philippines last June, Ferdinand "Bongbong" Marcos promised to moderate his predecessor's harsh drugs policies. Rodrigo Duterte had ordered the police to shoot dead any suspected dealer who did not surrender. This led to the killing of thousands of Filipinos. It also handed the police a much-abused opportunity to determine who was and wasn't a dealer. One of Mr Marcos's priorities is to reduce the corruption this encouraged in the Philippine National Police (PNP).

The minister of the interior, Benjamin "Benhur" Abalos, has asked all the country's police generals and colonels to resign by January 31st. Mr Abalos promises a government committee will then reject the resignations of all except those suspected of corrupt involvement in the drugs trade. Some will be prosecuted, says Mr Abalos. Others, against whom there are serious allegations but insufficient evidence to bring charges, will be allowed to retire. Of the 953 police generals and colonels asked to resign, all but 11 had done so by January 23rd.

Holster your weapon

The ploy is designed to get around the difficulty of defenestrating civil servants. It has incentivised the police chiefs to resign on the basis that appearing reluctant to do so could make them look guilty. The government used a similar trick to clean up the PNP in the 1990s; though some question whether that success can be repeated. The chief of the PNP, General Rodolfo Azurin, has said that fewer than ten senior officers are suspected of wrongdoing.

For Mr Marcos, discontinuing Mr Duterte's grisly policy is an opportunity to mend the reputation of his family dynasty, tarnished by the corrupt regime of his late father, the first President Ferdinand Marcos, who ruled from 1965 to 1986. But the new approach mainly indicates that the drugs war failed.

Law enforcers say at least 6,250 people were killed in drug operations during Mr Duterte's six years in office. Unofficial tallies suggest the toll may have been several thousand higher. Many of the victims were addicts or low-level hustlers. Some were allegedly murdered to prevent them revealing evidence of police involvement in the drugs trade. The violence achieved little. Abuse of methamphetamine hydrochloride, or *shabu*, as Filipinos call their street-drug of choice, remains rife. It costs roughly the same as it did in June 2016, when Mr Duterte became president.

New Zealand politics

Hipkins to be square

SYDNEY

With an election looming, a new prime minister has his work cut out

THE SURPRISE resignation on January 19th of Jacinda Ardern, New Zealand's widely loved prime minister, could have triggered bloodletting in the country's ruling Labour Party. But it has selected a new leader with remarkably little fuss. Within two days of Ms Ardern's announcement, Labour MPs had coalesced behind Chris Hipkins, the education minister. He was formally endorsed as Labour leader on January 22nd and sworn in as prime minister on January 25th. "Leadership contests don't have to be like the 'Hunger Games'," Mr Hipkins quipped.

No dramatic change of course is expected of him. The 44-year-old Mr Hipkins is a close friend and ally of Ms Ardern, whom he hailed as "one of our great prime ministers". He also borrowed one of her lines, promising to govern with "the heart".

Mr Hipkins has a reputation in Wellington, New Zealand's capital, for quiet competence, says Ben Thomas, a former adviser to the opposition National Party. During Labour's two terms in power, he has been given a series of hard problems to manage. As health minister he was in charge of implementing New Zealand's stringent response to covid-19, one of Ms Ardern's best-known—and recently most contentious—policies. Last year, as the government struggled to tackle an uptick in gang violence and robbery, Mr Hipkins was made minister of police.

Mr Hipkins has replaced Ms Ardern's deputy prime minister, Grant Robertson, with Carmel Sepuloni, the current minister for social development. She will be the first politician of Pacific ancestry (Samoan and Tongan) to hold the job. A more extensive cabinet reshuffle will soon follow.

The goodwill towards Ms Ardern in her party is unfeigned. New Zealand politicos are not used to the global popularity that she achieved, as a charismatic cheerleader for progressive values and moderation. Still, her popularity has waned, as voters' erstwhile approval of Ms Ardern's covid-19 policies—which helped her win an impressive electoral majority in 2020—has given way to a familiar gripe about high inflation (currently around 7%).

A recent survey suggests that Ms Ardern's net approval rating is slightly negative. Her main opponent, Christopher Luxon, leader of the centre-right National Party, had the same rating. Labour has been trailing National in the polls for months, currently by 32% to 37%. With a general election due in October, Mr Hipkins's spell as prime minister could be brief.

He has vowed to recover his party's standing by focusing on "bread-and-butter issues that people care about". That, he says, will include tackling the "pandemic of inflation" and making "the tax system fairer". In reality, Mr Hipkins's best chance of signalling a change of tack will lie in abandoning a clutch of unpopular reforms that Ms Ardern had been pushing. An expensive merger between the country's national television and radio broadcasters is likely to be scrapped. Unpopular legislation to overhaul management of the country's water infrastructure—which has enraged conservatives and left other voters cold—may also be reconsidered.

That could be enough to put Labour back into contention. Mr Luxon, a former chief executive of Air New Zealand, looks eminently beatable. And Mr Hipkins, a strawberry-blond known to his colleagues as "Chippy", has a down-to-earth, self-deprecating manner that Kiwis tend to like.

Covid-19 management aside, he may be best known for subsisting on a diet of cola and sausage rolls. And for those voters who crave another trailblazer at the helm, Mr Hipkins has an identity-political appeal all of his own. "It's about time we had a ginger at the top", he joshed, after he was nominated to replace the starry Ms Ardern. ■

Indonesia's industrial policy

Full metal jacket

SINGAPORE

It will soon be clear that nickel and aluminium are not alike

INDONESIA BANNED exports of nickel ore in 2020 in a bid to capture more of the metal's value. So far, so good. Exports of Indonesian nickel products were worth $30bn last year, more than ten times what they were in 2013. Nickel smelters have sprouted around the country, and makers of batteries, in which the metal is a key component, are building factories. On January 17th a cabinet official said the government was close to sealing deals with the world's two largest makers of electric vehicles (EVs), Tesla and BYD, to build cars in Indonesia. Flushed with progress, the government is now thinking beyond nickel.

"This success will be continued for other commodities," said Joko Widodo, Indonesia's president, last month. He confirmed that an export ban on bauxite, the ore used to make aluminium, was coming in June. The bauxite industry is scrambling to prepare itself for the shock. Production of the metal is expected to fall from 50m tonnes last year to 31m. Access to the country's limited refining capacity will be "fought over by 30 companies", the head of a bauxite lobby group, Ronald Sulistyanto, told local media. "Who wants to produce bauxite, but can't sell the bauxite?"

Off to the local Chinese smelter

Mr Widodo, who is known as Jokowi, says this wrangling represents mere teething troubles, and that the bauxite export ban will eventually lead to a tripling of bauxite-based revenues. The government has suggested that a ban on copper exports could be implemented next, with bans on tin and gold exports to follow. Such a wholesale embrace of resource nationalism looks ill-advised.

The country's pulling power in the global nickel market will be hard to replicate. Indonesia produces 37% of the world's nickel. But its bauxite, gold and copper production is less than 5% of the global total. And an earlier metals export ban under Jokowi's predecessor, in 2014, underlined how much market share matters. It spurred Chinese firms to build nickel smelters. But Chinese buyers of bauxite switched to Guinea and Australia. Indonesia's share of China's bauxite supply—then at 60%—collapsed. Today it stands at just 15%. The carnage forced Jokowi to pause that earlier export ban in 2017; it is not obvious why he wants to revive it.

The experiment with nickel also shows how costly bending metal supply chains is. Indonesia lured its new nickel smelters by promising a decade-long income tax holiday, a discount on mining royalties and exemption from VAT and export duties. It also compels nickel miners to sell them ore below the market-rate. Smelters of bauxite can expect similarly generous treatment—even though aluminium does not have the strategic importance of nickel, the metal at

▸▸

the centre of Indonesia's plans to be the nub of an EV supply chain.

Bauxite smelters are also expensive and harder to build than nickel smelters. Local firms are struggling to raise the capital needed for them, often around 18trn rupiah ($1.2bn), so the government is leaning on banks to offer prospective builders more generous terms. It has also eased environmental regulations on the industry—including potential penalties for environmental damage—to lower its costs. Although the government claims eight bauxite smelters are under construction, several are old projects long bedevilled by hiccups and delays, says Ahmad Syarif of Bower Group Asia.

All are Chinese investments. According to Mr Sulistyanto, only China's firms find investing in alumina refining compelling. Indonesia should reconsider whether increasing its economic dependence on China is wise, says Perrine Toledano, a director at the Columbia Centre on Sustainable Investment. If the nickel industry is a guide, the new bauxite smelters will employ Chinese nationals as well as locals. This can cause conflict: on January 14th two people died and 71 were arrested following a serious brawl between Chinese and Indonesian workers at a nickel refinery on the island of Sulawesi.

Indonesia's resource nationalism also risks falling foul of global trade rules. The WTO ruled against Indonesia's nickel export ban in November in a case brought by the EU, which frets that the ban is hurting its stainless-steel industry. More trade rows await once further bans kick in, but Jokowi is undeterred. "This is what we want to do: be independent, independent, independent," he said. ■

Banyan No going back

The Rohingya refugees are stuck in Bangladesh. It should permit them to thrive

In a bamboo shack in Kutupalong, the world's biggest refugee camp, a Rohingya woman keened last week for her sister. She was killed a few kilometres away, when her makeshift village in the no-man's land between Bangladesh and Myanmar was attacked and her hut set on fire. The woman was burnt alive.

Extreme violence is all too familiar to the Rohingyas. A Muslim people from Rakhine state in majority-Buddhist Myanmar, they have for generations been denied statehood and suffered persecution. The most brutal in recent times, carried out by the Tatmadaw, the Burmese security forces, was in 2017. Hundreds of thousands of Rohingyas crossed into Bangladesh with whatever they could carry and tales of murder, rape and torched villages. Over 900,000 Rohingya refugees are now housed in the Kutupalong and nearby camps, carved out of cleared forest south of Cox's Bazar in south-eastern Bangladesh.

While roaming the camps, Banyan heard many heart-aching stories. Nearly every Rohingya he spoke with dreamed of returning home. Yet, though Bangladesh's government is urging them to go, none is ready to. Rakhine state is currently peaceful by Myanmar's standards. The Tatmadaw, which seized power two years ago, is distracted by other terror campaigns it is waging, including against an armed resistance in the Burmese heartland. But Myanmar is falling apart. Many of the 600,000 Rohingyas remaining in the country are not in their villages but also in UN-run camps.

Though Bangladesh has given them refuge, violence still threatens the Rohingya fugitives. Thuggish gangs—part insurgent, part drug racketeer—have sprung up among the refugee population. The incinerated woman was a victim of one, the Arakan Rohingya Salvation Army (ARSA). Grown powerful on guns and smuggling *yaba*, a narcotic, ARSA and other Rohingya crews are terrorising Kutupalong. It is no longer considered safe to walk the camp after dark. About two dozen refugees, including community leaders, have been killed since July. Kidnapping and extortion are on the rise.

The Bangladeshi police in charge at Kutupalong are often a big part of the problem. They demand bribes or confiscate goods. When investigating crimes, they frame the innocent. They are said to be in cahoots with the gangs they are supposed to suppress. A Rohingya woman in her late 20s describes in terrible detail how she was raped in a police station and now lives in fear of a repeat.

Besides women, Rohingya children, who make up nearly half of the camp's residents, suffer most. Last year Bangladeshi officials shuttered 30-odd community-run schools in the camps that were teaching tens of thousands of students. That leaves UNICEF and a few NGOs with permission to teach the camp's youngest kids basic numeracy and literacy. A pilot project is under way to instruct 10,000 students in the Burmese curriculum. Otherwise, the refugees are denied schooling. A 17-year-old woman who says that she still hopes to become a doctor describes how frustrating this is. Denied education in the camps, the refugees are at the same time barred from studying outside. "I have a dream," she says, "but it is not allowed."

The refugees are also forbidden to work outside the camp. Any who wish to travel must first obtain a written permit from the local authorities (a situation disconcertingly similar to that of Rohingyas in Myanmar). Such restrictions, which refugees endure in many countries, reflect the Bangladeshis' fear of the Muslim refugees putting down roots in their country. But this is driving them to take more desperate and subversive measures. Some 250,000 Rohingyas are estimated to have procured fake Bangladeshi passports and disappeared abroad, including to South-East Asia and Saudi Arabia. Others pay people-smugglers to take them on a perilous boat journey to South-East Asia.

This mass crimping of human potential is repugnant. By habituating so many young refugees into unemployability, delinquency and perhaps extremism, Bangladesh is also storing up an enormous problem—probably, given the unlikelihood that many will return home, for itself. Though fixing Myanmar is beyond them, Western governments should at least urge Bangladesh to grant the refugees more normal lives. But is that likely? With a war in Ukraine and much else to distract the world's gaze, it is not on the Rohingyas, even as Western aid budgets shrink. And the residents of Kutupalong know it.

Vietnam, corruption and covid-19

Cleaning the house

HANOI

A post-pandemic anti-graft drive brings down the president

VIETNAM'S COMMUNISTS showed a flair for emergency logistics in the 1960s by shipping arms by bicycle along the Ho Chi Minh trail. When covid-19 struck in 2020, their successors lived up to that billing. As borders closed, tens of thousands of Vietnamese citizens were stranded abroad. Vietnam's government promptly chartered almost 800 flights to bring them home.

Yet it soon emerged that not everyone's trip had gone smoothly. Embassy officials had demanded inflated fees of $5,000 or more to facilitate the repatriations. "One woman in the quarantine camp where I stayed paid triple what I did," recalled one evacuee. Again, the government was swift to act. In early 2022 investigators began arresting officials for allegedly shaking down the returnees for kickbacks. Dozens now face prosecution, including two former ministers. On January 17th Nguyen Xuan Phuc, Vietnam's president, resigned to take responsibility for the scandal.

If corruption is not uncommon in Vietnam, presidential resignations are. Mr Phuc's underlines the remarkable degree to which the pandemic has ignited a decade-old anti-corruption drive known as *dot lo* ("blazing furnace"). This crackdown is the signature policy of Nguyen Phu Trong, who as general secretary of the Vietnamese Communist Party (VCP) is the country's paramount leader—more powerful than the prime minister or president.

Like Xi Jinping in China, Mr Trong has used corruption-fighting to amass ever more power for himself and the Communist Party. "Before the anti-corruption campaign there was a balance between the party and the state," says Nguyen Khac Giang of the Vietnam Centre for Economic and Strategic Studies in Hanoi. Yet most of the senior officials purged for corruption rose mainly through government organs, not the party. The party has become increasingly dominant as a result.

The crackdown is also a serious reform effort. The 78-year-old Mr Trong, now serving his third five-year term, belongs to the last generation of leaders who experienced the war against America as adults. He is considered a true believer who wants to purge the VCP of the graft that spread after Vietnam adopted a market economy in the 1990s. Observers "got him completely wrong: we thought of him as a transitional figure," says Andrew Wells-Dang, a Vietnam expert at the United States Institute of Peace, a congressionally funded but independent body. Some in the party reportedly call him *con trau dot*, "stubborn bull".

Those who corruptly exploited the pandemic were waving a red flag at him. In December 2021 the CEO of Viet A, a medical-equipment firm, was charged with bribing officials to purchase his company's covid tests. Arrests of allegedly complicit bureaucrats followed, including the ministers of health and of science and technology, whose departments had falsely claimed that Viet A's tests were certified by the WHO and the British government.

Staff at embassies from Angola to Japan were punished over the repatriation flights. In April a deputy foreign minister was arrested over the scandal. The powerful ministry of public security, which carries out corruption investigations, made allegations against three of its own officials. On January 5th the purge cost two deputy prime ministers their jobs, including the foreign minister, who some considered a possible future prime minister.

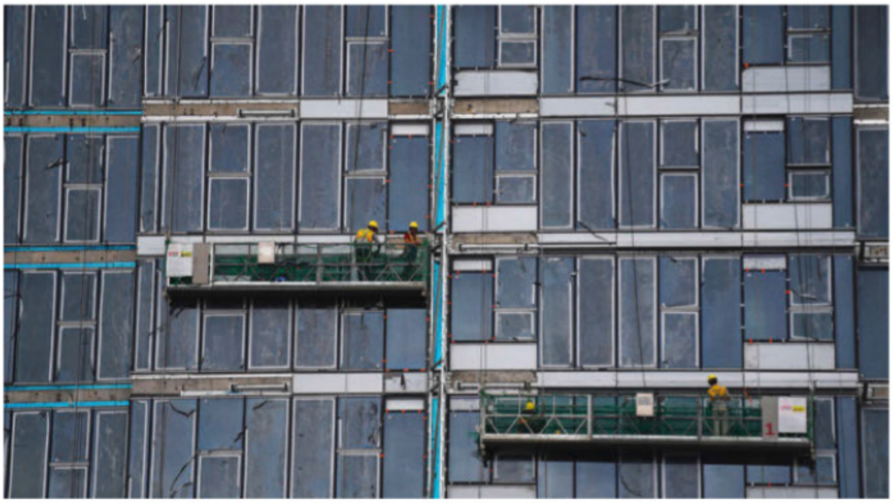
The crackdown has also hit the financial sector. In April managers at a commercial-property group were arrested after it made a bid of over $1bn for land in Hanoi. In October the arrest of the head of another property company sparked a run on a bank which had sold its securities.

The campaign has been somewhat successful. Vietnam's ranking in Transparency International's corruption-perceptions index has risen from 111th in the world to 87th. The country is implementing accounting standards under investor-protection agreements with America and the European Union, says Oliver Massmann, a lawyer who has advised the government.

Yet some arrests look politically motivated. Nguy Thi Khanh, a celebrated climate activist, was sentenced in June to two years in prison for failing to pay tax on a prize she had been awarded. The campaign is also having perverse economic effects. With stricter accounting, says Dr Massmann, "corrupt officials have no interest in implementing capital-investment projects, because they can't 'eat' from them." Even some honest officials are so scandal-averse that they won't approve projects.

The effect shows up in investment statistics. The disbursement rate of state capital investment—the share of the government's planned spending on roads and the like which was actually spent—fell from around 70% in 2011-14 to about 50% in 2019. After a post-covid jump, last year it dropped to 58%. "Officials are afraid of any kind of responsibility, giving signatures or preparing public documents for projects," says Mr Giang. The resultant snarl-up is evident even in tax collection. Several foreign residents report being unable to pay their taxes. The relevant officials worried that they might be held responsible for collecting the wrong amount.

The logjam is slowing badly needed infrastructure projects. The nationwide North-South Expressway remains a patchwork. Ho Chi Minh City's promised metro has yet to open a decade after work on it began. This will not jeopardise Vietnam's growth in the short term. It was estimated at 7.5% in 2022 and is expected to top 6% this year. As America and Europe decouple from China, manufacturers are increasingly turning to Vietnam. Yet Mr Trong wants it to become a middle-income country by 2030. And for that to be feasible, honest officials should be able to approve projects without fear of being arrested. ■



Onwards and upwards in Ho Chi Minh City

Back to Blue

An initiative of
Economist Impact and The Nippon Foundation

AN OCEAN CRISIS IN THE MAKING

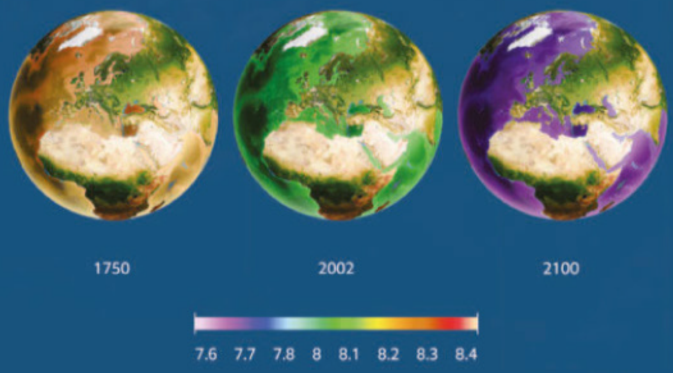
The world's CO_2 emissions are not just warming the atmosphere and the seas. They are creating an existential threat to many types of marine life in the form of ocean acidification.

By absorbing CO_2 from the atmosphere and sequestering it for long periods, the ocean helps to mitigate global warming. But emissions continue to rise, and the ocean can't sequester the carbon quickly enough. The result: an increase in ocean acidity.

"Ocean acidification, warming and deoxygenation are interacting with each other to create a perfect storm of environmental challenge," says Steve Widdicombe, director of science at Plymouth Marine Laboratory and co-ordinator of the Ocean Acidification Research for Sustainability (OARS) programme.

As CO_2 dissolves upon reaching the ocean surface, the reaction releases carbonic acid. This alters the ocean's chemistry.

Maps of sea-surface pH from the pre-industrial era to the future



Courtesy of Andrew Yool. Adapted from HS Findlay and C Turley, 2021. Ocean acidification and climate change. In: TM Letcher (Ed.), Climate Change: Observed Impacts on Planet Earth (Third Edition)

Carbonic acid depletes the carbonate that marine organisms such as shellfish need to form their hard outer structures. The organisms' ability to guard against predators, grow and reproduce is also weakened.

Scientists have been observing an accelerated decline in the pH level of seawater, an indicator of ocean acidification. Global ocean pH has fallen from 8.2 to below 8.1 in the past century and is lower than 8 in some waters. On the pH scale of 0-14, this is significant. If carbon emissions continue rising at their current rate, the pH level will be below 8 in most of the global ocean by 2100.

Acidification is often higher in coastal areas than in the open ocean. This is due to the effects of upwelling—when deep CO_2-rich water rises towards the shore; of biological processes, such as the decomposition of organic matter that releases stored CO_2 into the water; and of human activity, such as sewage discharge and chemical run-off.

The effects of acidification are compounded by under-saturation of aragonite, a form of calcium carbonate that molluscs use to form their shells and corals their endoskeletons. As saturation lessens, seawater becomes increasingly corrosive, putting organisms under stress and ultimately causing their shells to dissolve. Undersaturation is approaching such levels today in polar waters, where CO_2 is more easily absorbed than in warmer waters.

IMPACTS

Scientists warn that, even if we slash carbon emissions, some warm-water and polar species will be at high risk of acidification's impacts by 2100. If emissions continue unabated, many more species and habitats will be at high risk as early as 2050.

The decline of these resources that form an integral part of marine food chains will unquestionably rebound on humanity.

ADVERTISEMENT

"OCEAN ACIDIFICATION, WARMING AND DEOXYGENATION ARE INTERACTING WITH EACH OTHER TO CREATE A PERFECT STORM OF ENVIRONMENTAL CHALLENGE."

Steve Widdicombe
Director of Science, Plymouth Marine Laboratory
Co-ordinator, Ocean Acidification Research for Sustainability (OARS) programme

Society can turn back the tide of acidification, but must act quickly. Specifically:

Reduce carbon emissions

Build ecosystem resilience

Step up research efforts

If unaddressed, ocean acidification will put coastal economies and the aquaculture, tourism and other jobs that rely on them at grave risk. Past projections of economic losses from depleted shellfish production alone range from $75m in America to over $1bn in Europe.

Acidification will also put at risk populations that rely on shellfish and other seafood for much of their protein.

WHAT CAN WE DO?

Combating ocean acidification first requires a dramatic reduction in CO_2 emissions. There are additional measures that society must take, however, to lessen acidification's impacts and understand it more fully. For example:

- Expand the use of climate-smart marine protected areas to develop new methods of mitigating against or adapting to acidification
- Support the development of technologies that extract carbon from seawater
- Widen the use of mangroves, seagrasses and other nature-based solutions to capture and sequester carbon before it reaches seawater
- Step up research that advances our knowledge about acidification, including how it impacts marine coastal ecosystems

"In the case of Japan's coastal areas, although no direct effects have been observed from our monitoring surveys, ocean acidification is steadily worsening," says Mitsuyuki Unno, the executive director at The Nippon Foundation. "We must therefore move quickly to learn how to mitigate its effects and adapt to them. This is especially critical for coastal areas, where the effects of acidification will be most devastating."

"It is within our power to avoid the direct effects of ocean acidification," adds Charles Goddard, the editorial director for global initiatives at Economist Impact. "Like that of other ocean and climate emergencies, combating it requires taking local, national and global actions. There is no time to lose."

To find out more, visit:
backtoblueinitiative.com/ocean-acidification/

To learn more about ocean acidification and what it means for our ocean and the industries that rely on it, register for our free event on February 2nd 2023 and hear directly from the experts. **Register via the QR code.**

ECONOMIST IMPACT

日本財団 THE NIPPON FOUNDATION

Diplomacy and business

A cuddlier China?

DAVOS

In the year of the rabbit, China will try to win over Westerners and private firms. But Xi Jinping is unlikely to change

LIU HE IS a grey-haired 71-year-old on the verge of retirement from China's highest level of economic policymaking. He must have many regrets, not least the battering of his country's economy by a now-abandoned struggle to crush covid-19, and by the disease's recent rapid spread. But Mr Liu grinned with obvious pride as he recalled how members of the global elite at the World Economic Forum in Davos had responded to his delegation's upbeat remarks there a few days ago. "All kinds of people said, 'Hey, China is back again!'" he told a television reporter.

Mr Liu, who is one of China's four deputy prime ministers and a trusted adviser of China's leader, Xi Jinping, was being modest. It was he, not others in his entourage, who had stolen the show. Among the assembled business titans his speech on January 17th struck a welcome note given the fragile state of the world economy. "If we work hard enough," he said, "the Chinese economy will see a significant improvement in 2023." He pledged "more focus" on supporting private business—which has been deeply disturbed by Mr Xi's campaign of the past two years to tighten controls over technology firms and his stepped-up use of Marxist-sounding language. To those worried about China's many barriers to foreign firms, Mr Liu had soothing words: "China's national reality dictates that opening up to the world is a must, not an expediency. We must open up wider and make it work better."

There was nothing strikingly new in Mr Liu's remarks. But their emollient tone fuelled speculation among observers that, as well as ditching the "zero-covid" policy, Mr Xi has decided to tone down some of the rhetoric that has caused jitters among businesspeople at home and abroad, ease pressure on entrepreneurs and prevent further deterioration of his country's badly strained ties with the West. China's state-controlled media have encouraged such thinking. After attending the forum Mr Liu met America's treasury secretary, Janet Yellen, in Zurich for their first face-to-face encounter since she took up her post two years ago. One Chinese news outlet called it "another sign of ice-breaking between the world's two largest economies".

→ Also in this section
39 Tensions with Taiwan
40 Pressure to marry
41 Chaguan: Revealing propaganda

It may well be that China sees a need to adjust its tactics on a range of matters, both economic and diplomatic. At 3%, annual GDP growth last year was the second-slowest since the death of Mao Zedong in 1976. America's efforts to curb the flow of cutting-edge technology to China are frustrating Mr Xi's ambitions for supremacy in the tech sector. As geopolitical tensions have grown, and covid has exposed the vulnerability of China-linked supply chains, Western firms have become much more nervous about relying on the country as the source of every widget. China's cosy ties with Russia, and refusal to censure its invasion of Ukraine, have poisoned China's relationship with much of Europe, a region it has long been trying to win over in an attempt to weaken America's alliances.

China likes to use Davos as a place for buttering up foreigners. In 2017, nearly five years after he took power and began spreading ripples of unease across the West, Mr Xi himself turned up. He was the first supreme leader of China to attend the forum. The audience heard a portrayal of

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the country as a champion of globalisation and leader of efforts to combat climate change. America's president-elect, Donald Trump, appeared determined to steer in the opposite direction. That made it all the easier for Mr Xi to score points.

But China's recent actions also mark a shift. One was Mr Xi's decision to meet his American counterpart, Joe Biden, on the margins of a G20 summit in Bali in November. Since August, China had been barely on talking terms with America because of a visit to Taiwan by Nancy Pelosi, then the speaker of America's House of Representatives (China claims the island and abhors official contacts with it by foreigners). Antony Blinken, America's secretary of state, is expected to visit Beijing in February, the State Department says. It would be the first such trip by America's most senior diplomat since 2018. Also next month films by Marvel Studios, a Hollywood company, will be shown in Chinese cinemas, ending China's unexplained four-year ban.

China is putting out feelers to other Western countries, too. While in Bali, Mr Xi also met Australia's prime minister, Anthony Albanese. It was the first one-on-one encounter between the two countries at that level since 2016—Australia having offended China on numerous fronts, including by calling for an independent inquiry into covid's origins. China appears to have eased a two-year ban on imports of Australian coal. And Mr Xi has stepped up the tempo of diplomacy with Europe. In November he hosted a visit by Germany's chancellor, Olaf Scholz. President Emmanuel Macron of France is expected to follow early this year.

Soothing the private sector

On the economy, the tone is also changing. The official account of the Communist Party's annual closed-door gathering in December to discuss economic policy, the Central Economic Work Conference, contained far less of Mr Xi's ideological language and no railing against "disorderly expansion of capital", which fintech firms had previously been accused of perpetrating. It said China should "vigorously develop" the digital economy. The Asia Society Policy Institute, a think-tank in New York, said the wording was arguably Mr Xi's "most affirmative and authoritative statement on the political and ideological legitimacy of the private sector" since he came to power.

In recent weeks, the government has also retreated from its two-year-long attempt to curb property-market mayhem by imposing tight limits on borrowing by developers. The sector still badly needs an overhaul (see Finance & economics section), but businesspeople are relieved by the return to a more cautious approach. The campaign had been hammering sales.

But it would be wrong to conclude that Mr Xi himself has changed, or that he is politically weaker. China's chaotic exit from zero-covid—a policy with which he was closely linked—may have dented his credibility among China's elite and an unknowable number of regular folk who have lost relatives to the virus, and now see their deaths covered up. But the country's political machinery hums along as it did in the build-up to a party congress in October, at which Mr Xi secured an unprecedented third five-year term as general secretary and a Politburo packed with loyalists.

Around the country, officials still pepper speeches with fawning references to Mr Xi and his leadership. China is still flexing its muscle around Taiwan (see next story). Even as they try to mend fences with Western countries, China's envoys continue to use the sharp language about the West that has become a hallmark of diplomacy under Mr Xi. In Davos, Mr Liu may have said what his audience wanted to hear about China's economy. But his call for an end to "cold-war" thinking was a veiled snipe at America. In China's view, America is the chief purveyor of it. He twice mentioned Mr Xi's idea of a "community with a shared future for mankind". This means, in effect, a new world order in which criticism of China is taboo.

Mr Xi will try to use two big political events this year to boost public and business confidence in the economy and in his support for non-state firms. The first is the annual session of the country's parliament, which is due to be held in March. The outgoing prime minister, Li Keqiang, will deliver the main report. It is likely to echo the language of December's work conference. In the autumn the party's 376-member Central Committee will meet. By tradition, at this stage of China's political cycle, it should focus on the economy. Expect reform to be the buzzword.

But cynicism will abound, too. A year after he took power Mr Xi presided over a similar meeting of the Central Committee. Its vaguely worded communiqué gushed with talk of reform that soon began to sound empty as he focused on boosting party control over business, and beefing up state-owned firms in particular.

Four years later, Mr Xi had his turn as Davos man. But subsequent years of his rule saw ever more draconian clampdowns at home—not least in Xinjiang and Hong Kong—a downward spiral in relations with the West and growing despondency among private entrepreneurs and foreign investors alike. "There's just a certain amount of wishful thinking on some of this," says Andrew Small of the German Marshall Fund of the United States, a research centre. "And I think, on the Chinese side, they're aware that wishful thinking is something they can take advantage of." ■

China and Taiwan

Tense as ever

KAOHSIUNG

China's softer approach to diplomacy does not include Taiwan

THE HOWLS of China's "wolf warrior" diplomats seem less intense of late, allowing the tones of more measured officials to resonate. But the change in timbre of Chinese diplomacy does not extend to Taiwan, the self-governing island which America supports and China claims. This month China's Eastern Theatre Command, which is responsible for Taiwan, released a music video called "My war eagle flies around the precious island". It depicts Chinese jets and warships surrounding Taiwan, while a singer softly calls for a lost love to return home.

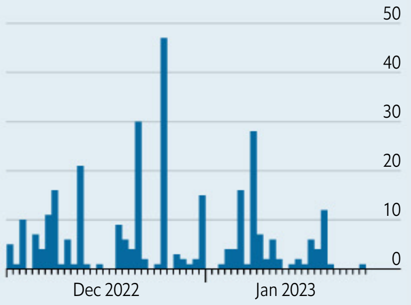
China's actions are even more clear. In December and January it held military exercises around Taiwan, deploying dozens of warplanes and several warships. China has been trying to erode the boundaries that divide Taiwan from the mainland. In 2022 Chinese planes made over 1,700 incursions into Taiwan's air-defence-identification zone (ADIZ), prompting military alerts. China has also been increasing its sorties across the median line of the Taiwan Strait, the de facto maritime border between China and Taiwan. It has carried out 306 such missions since December 1st (see chart on next page).

China's largest incursion to date, on December 25th, saw 47 aircraft cross the median line. A Chinese spokesman, Colonel Shi Yi, said those missions were a response to American "provocation". He was likely referring to a bill that President Joe Biden

Is he ready?

Over the line

Chinese sorties past the Taiwan Strait median line*



Source: Taiwan Ministry of National Defence

*Including south-east & south-west airspace

signed on December 23rd which authorised billions of dollars in grants and loans to Taiwan to buy American weapons.

Only $2bn in loans made it into the final spending bill that was passed into law. But America is planning to expand its own navy and training its marines for island fighting. In January top officials from America and Japan said they would work more closely on security and defence, and that America's marine deployments on Japan's south-western islands, near the Taiwan Strait, would be upgraded.

Taiwan has been taking steps to improve its defences, too. President Tsai Ing-wen announced in December that from 2024 men would be required to perform one year of military service, up from four months, and that conscripts would receive better training. Taiwan plans to spend $19.4bn on defence in 2023, up by 13.9% on last year. Still, experts say these steps are not enough. China spent $230bn on defence last year. It has expanded its naval, missile and nuclear capabilities. What Taiwan really needs is a new strategy that focuses less on big, expensive arms, which would not survive Chinese strikes, and more on agile and concealable weapons.

Yet during a recent Taiwanese military exercise in the city of Kaohsiung (pictured on previous page), big and cumbersome weapons played a central role. Soldiers wearing red helmets, marking them as invaders from the mainland, cowered on a field as tanks and armoured vehicles approached. "Under the strong power of our battle brigade, the enemy soldiers have retreated," a Taiwanese announcer crowed.

The drill was meant to reassure Taiwan's citizens ahead of the lunar new year on January 22nd (it is celebrated on both sides of the strait). Polls suggest the public is sceptical. In one last year, more than half of respondents said they did not believe Taiwan could hold off a Chinese invasion for very long. Things have remained mostly calm over the holiday, at least. Only one Chinese plane crossed the median line between January 21st and 25th. ■

Marriage pressure

Itching to hitch 'em

Chinese singles face the heat over the holiday

IN THE WEEKS leading up to the lunar new year on January 22nd, millions of people in China travelled back to their home towns to celebrate the country's biggest holiday. Some have not been home for two years, thanks to pandemic travel curbs. There have been joyful reunions, fireworks and banquets. But, for single people of a certain age, there have also been awkward questions.

The holiday is a chance for parents, aunts, uncles—even distant cousins—to press their young relatives to get married. Such nagging occurs in most countries. In conservative China, though, the pressure is intense.

Online searches for *cuihun* (urging someone to wed) peak every year at this time, according to data from Baidu, a search engine. Beleaguered 20- and 30-somethings are flooding social media with complaints. "I used to like the atmosphere at new year, but now I hate it more and more," said one person on Weibo, a Twitter-like platform. "If you are not married, you're urged to get married. If you are married, you're urged to have children."

Nowadays the pressure comes from the state, too. China's young people have been marrying later—or not at all. The average age of a first-time newly-wed was 28.7 in 2020, about four years higher than it was a decade ago. China registered 7.6m marriages in 2021, the lowest number on record.

Fewer marriages have meant fewer births. According to the National Bureau of Statistics, China had 1.412bn people at the end of last year, down by 850,000 on the year before. It is the first time the population has declined since 1962, after millions died in a famine brought on by Mao Zedong's "Great Leap Forward". A shrinking, ageing population is bad for economic growth and will create a huge burden of care. But incentives for couples to have children, such as cash handouts and tax cuts, have had little effect.

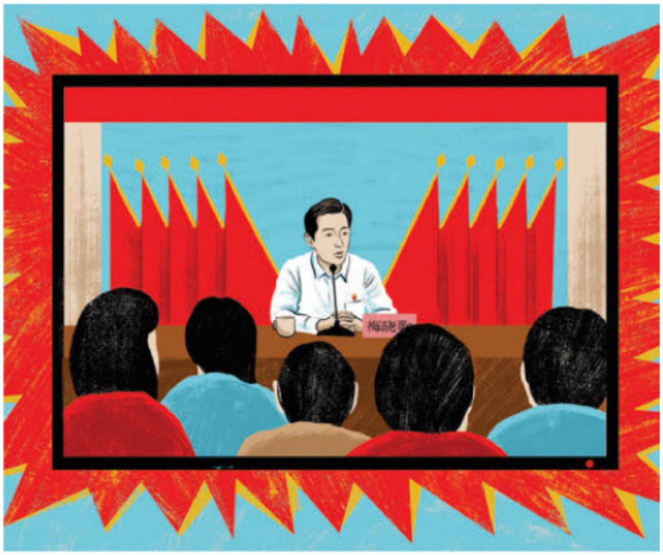
There are several reasons behind this demographic crunch. Young people are better educated than previous generations and more likely to spend their 20s pursuing careers. This is especially true of women. Owning a car and a house is seen by many as a basic requirement for settling down—and many young people have neither. In cities, a gruelling work culture leaves little time for marriage and kids. In rural areas, a hefty bride price can get in the way of a match.

Parents don't care for such excuses. Some singles have come home to find that a string of blind dates has been set up for them. Others provide *cuihun* countermeasures. One netizen suggested telling parents that it is tough to find a partner worthy of them. An article published two years ago in *Chongqing Daily*, a local newspaper, advised feigning deafness or going on the attack by interrogating aunts and uncles about their own children's marital status.

Another solution is to rent a boyfriend or girlfriend for new year. Some actors provide such a service. But the ruse was easier to pull off when the holiday was celebrated over video.

Chaguan | Performance and legitimacy

A revealing propaganda drama about a virtuous, village-born Communist Party chief



Propaganda often clarifies how leaders see themselves, and would like to be seen. Look closely, and it can also expose insecurities. In this new year China's propaganda machine is working overtime to promote "County Party Committee Courtyard", a 24-part television drama now showing on multiple Chinese state and commercial channels.

The drama only obliquely refers to the party's supreme leader, Xi Jinping. At moments, characters cite his most famous speeches and slogans. But his vision of party rule is everywhere. Chinese media reports have called it a tribute to last autumn's Communist Party congress. Mr Xi, whose official biography emphasises his early years of rural service, pays close attention to the reputation of the grassroots party. That helps to explain his years-long anti-corruption drive and his orders to shun extravagant living. The son of revolutionary elders, Mr Xi invokes history (rewritten to play down the purges and frenzies of the Mao years) to portray party members as self-sacrificing servants of the people who have always governed most effectively when they mobilise the masses.

After Mao Zedong died in 1976 and China's Communist Party ditched class warfare and revolution as its reasons for being, the country began a giant experiment in performance legitimacy. That is political-science jargon for the mandate to rule that even unelected, iron-fisted regimes may try to earn by delivering prosperity, order or other public goods. In the first decades of China's reform and opening, many ordinary folk grumbled that officials were focused on economic development (and self-enrichment) rather than other forms of progress. In closed-door speeches, Mr Xi gave warning that ruling parties fall if they become corrupt and distant from the masses. His stated ideal is for party members to be unusually virtuous, and seen to be so. If that means frequent shows of frugal living and talk of officials keeping the masses in their hearts, so be it. Mr Xi's version of performance legitimacy involves a hefty dose of performing.

Yet such showmanship carries risks. An early episode of the drama shows its star—a handsome, diligent and selfless Communist Party cadre, newly promoted to head a poor rural county—fretting late at night about whether his eloquence comes across as inauthentic. In the episode, a smartphone video of an emotional speech by the county chief, Mei Xiaoge, has just gone viral on social media. Viewers see the speech being given, then his underlings watching its filmed version in their offices, tears welling in their eyes. In his impromptu address, the chief recalls his father, as he urges retired grassroots party members to lead by example and sign an agreement to move their village graveyard as part of a wider modernisation campaign. He ends by bowing deeply to old party veterans. Soon they are lining up to sign, though that means their ancestors will be dug up.

Many hours later, sipping tea alone with the county's party secretary, the chief frets that ordinary folk will see the video and think him "too good at putting on a show". The secretary (whose party rank makes him the county chief's boss) offers reassurance. The speech was moving, and you do come from the grassroots, the party boss tells his deputy.

The staging of this exchange is strikingly austere. The pair are working late in a small and cheerless official apartment, far from their families, debating the ethics of leadership. They might be priests on a mission, and indeed the series is filled with lines which make the party sound like a faith-based project. The county chief, who is soon promoted, urges underlings to act at all times so they can look the masses in the eyes.

A severe man, often dressed in the white shirt and black trousers of a senior official, Mei shocks county bureaucrats by ditching unrealistic targets for economic development. He pledges instead to tackle long-neglected environmental problems and failures of governance. His style of management is personalised, involving anonymous visits to uncover problems and impassioned speeches to farmers. In return, locals believe that—as a village boy—he has their interests at heart, as when he asks them to lease their land to commercial farmers. Time and again he is shown winning over residents of Guangming County, his fictional rural patch, with his oratory and thrift (he is shown eating noodle soup from a roadside canteen, rather than gorging at banquets).

A self-policing party

Alas for party chiefs, in the real world their stock of village-born paragons like Mei Xiaoge is not unlimited. The drama does not really wrestle with this problem. It was produced under the guidance of the State Administration of Radio, Film and Television and the party's central propaganda department. Striving to avoid a boring series peopled by perfect officials, film-makers included some sinners. The villainy is pretty low-level, though. There are glimpses of local graft, often involving environmental rules, and some bribe-taking by traffic police. A junior official steals the work of an idealistic new colleague. But in the series, internal checks and balances ensure that justice is served. Local state television unmasks the corrupt police (an improbable plotline, given the muzzling of journalists in Mr Xi's China). Under questioning, shamefaced police explain that they have not been paid for months.

The series does show citizens protesting about injustice and petitioning higher authorities for redress. But the loudest protester, "Old Qiu", is depicted as a pompous attention-seeker whose family wants him to pipe down. In the end even Old Qiu agrees to relocate, moved by a retired official who lets diggers demolish his beloved, tree-shaded house and garden. In Mr Xi's China, the party needs no external accountability. In a rather abrupt ending, Guangming County is shown filling with beaming babies and children, reflecting the party's concern about a shrinking population. Propaganda is revealing stuff. ■

Egypt's economy

Pyramid scheme

CAIRO

A decade of deficits has caught up with Egypt's unproductive economy

IT IS ALL anyone can discuss. For the poor, trips to the market are now an ordeal: shopping bags get lighter, yet bills get bigger. The middle class must choose between car payments, school tuition and groceries. Business owners are wrestling with supply-chain woes caused by a shortage of hard currency that has left billions of dollars of goods stuck at ports.

The past few weeks have been a reckoning for Egypt's unsustainable economy. Since 2013, when Abdel-Fattah al-Sisi seized power in a coup, it has been characterised by a moribund private sector, large twin deficits and debt-fuelled state spending on infrastructure projects, some of dubious value. Egypt posted decent growth numbers, but they were a mirage: for most of its 104m people, life kept getting worse.

Last year the fiscal deficit was 6.2% of GDP and the current-account shortfall was 3.6% (see chart 1 on the next page). The government debt-to-GDP ratio hovers around 90%, while external debt has more than doubled since 2013, to 34%. Debt service consumes 45% of government revenue.

Well-meaning Egyptians have warned for years that the country was tumbling into a debt trap. Mr Sisi ignored them, and foreign investors, lured by some of the world's highest interest rates, were eager to help him sustain his illusion. Buying short-term Egyptian debt seemed a lucrative and risk-free proposition: surely the biggest Arab country was too big to fail.

Failure is still unlikely—but no longer impossible. The pound is the world's worst-performing currency this year, which fuels galloping inflation. Soaring interest rates will be a drag on private business. The public sector, a main driver of recent growth, is being told to cut back. After years of short-sighted policy, there are no easy solutions to Egypt's woes.

The crash began with Russia's invasion of Ukraine, which caused jittery investors to yank $22bn of portfolio investments out of Egypt in a matter of months. That worsened shortages of hard currency. The government restricted imports to cut the trade deficit and went back to the IMF for another loan, its fourth since 2016 (in December it eventually received $3bn). In June Muhammad Maait, the finance minister, said his country had to focus on building less fickle sorts of inflows, like foreign direct investment and export revenue. "The lesson we have learned [is that] you cannot depend on" hot money, he said.

The lesson was soon forgotten. In December the government announced that $9.5bn-worth of goods were stuck at ports: businesses could not find the dollars they needed to clear their shipments. A currency black market emerged, with pounds trading well below the official rate. Egyptians abroad over Christmas got messages from their banks imposing withdrawal limits as low as $100 a month.

That left few options. The pound, which ▸▸

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was meant to be floating but was unofficially propped up by the central bank, had already been devalued twice in 2022. On January 5th it was allowed to slide again, eventually settling at around 30 to the dollar, a 20% drop. It has lost 50% of its value in the past year (see chart 2). Analysts at several banks think it is still overvalued.

The devaluation brought hundreds of millions of dollars of inflows, which helped to ease the import backlog. But it will also stoke already-high inflation, which hit 21% in December (and 37% for food). Figures for January will worsen. After Egypt's first big devaluation, in 2016, inflation stayed above 20% for 13 months.

These numbers are catastrophic for the poor. Fatima, a housewife, runs through her diminished shopping list. Eggs are now an occasional luxury. The price of a box of 30 has doubled to 100 pounds. Her family's preferred brand of cheese is 80% more expensive than a year ago. Meat? Forget it. Some butchers fear they will have to close because so few of their customers can afford to buy their goods. A kilo of chicken breast that last year sold for 90 pounds now fetches almost 200.

Talk like an Egyptian

The government puts the poverty rate at 30%, but official figures have not kept pace with bouts of high inflation and repeated blows to the currency. In 2016 the national poverty line was fixed at the equivalent of $55 a month. Today it is $29. The middle class is tumbling towards poverty.

Even in the pandemic year of 2020, Egypt grew at a decent rate of 3.6%. But appearances can mislead. Growth was fuelled by public spending and a booming natural-gas sector. The latter produces few jobs. And the state can no longer afford the megaprojects that have defined Mr Sisi's tenure. He expanded the Suez canal, started work on a new capital city and built thousands of kilometres of roads. But in January the cabinet said it would halt work on projects that require hard currency.

As for the private sector, it is anaemic. The purchasing managers' index, a measure of business activity, has shown a contraction for 25 months in a row and for 75 of the past 84 months. Businessmen cite many ills. The domestic market is huge but poor. State schools are atrocious, so the labour force is ill-trained. The government has taken a scattershot approach to industrial policy: if you want every sector to be a national champion, none will be.

High interest rates are another obstacle. In early January two state-owned banks briefly offered one-year certificates of deposit at 25% interest. The scheme brought needed liquidity into the financial system. It may be a drag on investment: earning interest from your bank is an easier return than opening a factory.

Then there is the army, which runs a vast economic empire that makes everything from pasta to cement. It grabs an ever-larger chunk from private business: it is hard to compete with an entity that does not pay taxes or customs fees, enjoys preferential access to land—and can lock up its rivals. The founder of Juhayna, a big food company, was probably jailed without charge for two years because he refused the army's demands for a controlling stake (he was released on January 21st).

The government says it will sell stakes in numerous state-owned firms, including army companies like Wataniya, which runs petrol stations, and Safi, a bottled-water company. Similar promises have gone unfulfilled before. In its latest agreement with the IMF it also pledged to end tax breaks and other special treatment for army-run companies. Whether Mr Sisi has the will and the ability to deliver is unclear.

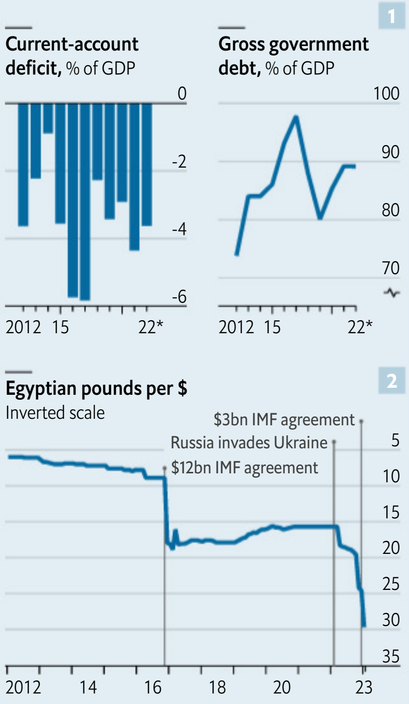
When he took power, many Egyptians were grateful for a respite from their post-revolutionary chaos. There are no reliable opinion polls in such a repressive country, but anecdotes suggest that many Egyptians have lost faith in his leadership. It is increasingly common to hear criticism of the president in markets, taxis and cafés. A few well-connected Egyptians are quietly urging him not to run in next year's presidential election.

He cannot count on much help from abroad. A decade ago, with the economy in turmoil after Mr Sisi's coup, Gulf states poured in $25bn to help stabilise it. They are unlikely to be so generous this time. Instead of offering aid, Gulf states are buying up lucrative Egyptian assets on the cheap. There is even talk that Mr Sisi might sell or lease the operations of the Suez canal, probably to Gulf firms, which would be politically explosive: control of the canal is a totemic issue in Egypt's modern history.

In some ways, Egypt finds itself back where it was in 2016, when it reached an agreement for $12bn with the IMF. It implemented some fiscal reforms, such as subsidy cuts, but ignored the sorts of structural changes that would make its economy more competitive. Since then the country's crisis has only deepened. ■

Falling down like a domino

Egypt



Sources: IMF; Refinitiv Datastream *Estimate

Sick man of the Gulf

No cheques please, we're Kuwaiti

DUBAI

A populist plan to pay off private debts is another sign of the country's ills

IN OCTOBER KUWAIT'S finance ministry sent a stern message to the government: no frivolous spending. Yes, oil prices were high and the deficit had narrowed, but this was a time for fiscal discipline. And yet a few weeks later lawmakers introduced a bill that would force the state to pay for new cars, holidays or indeed anything else citizens might have bought on credit.

Under the proposal, the government would buy up billions of dinars' worth of consumer loans. It would write off the interest and schedule repayments on the principal over a long period, with monthly instalments deducted from a cost-of-living allowance paid to citizens. The state would, in effect, pay off private debts.

The proposal has caused an uproar in Kuwait's parliament, which unlike others in the Gulf has real power. Ministers walked out of a session earlier this month in protest. On January 23rd the cabinet resigned because of its power struggle with parliament, the fifth time since December 2020 that a Kuwaiti government has quit.

Supporters say it would help struggling families. Critics say the measure would blow up the public finances. The central bank estimates that more than 500,000 Kuwaitis have eligible loans worth 14bn dinars ($46bn), 60% of projected revenue in this year's budget. (MPs claim the plan would cost far less.) It would also set a precedent for future write-offs: the scheme is the epitome of moral hazard.

These ought to be boom times for Kuwait. It is the world's tenth-largest oil producer, pumping around 2.8m barrels a day, and a tiny country of just 4m people, fewer than half of them citizens. The IMF says GDP grew by 8.7% last year. Its sovereign-wealth fund is one of the world's biggest, and the government's debt-to-GDP ratio of 7% is among the world's smallest.

But dysfunctional politics is holding it back, as it long has. Conservative Islamists did well in last year's general election. About one-third of the newly elected MPs have signed a pledge that called for gender-segregated schools and other strictures. Last year hardliners tried to ban an annual marathon because it featured musical acts and men and women running together.

Along with conservatism, parliament has a populist streak. Other Gulf countries are trying to diversify their economies away from oil and entice foreign investors. Kuwait has all but given up on plans to grow its private sector.

Government policy is little better. Early in the pandemic, amid worries about food security—90% of Kuwait's food is imported—it imposed price controls. It left them in place long after it was clear that imports were unaffected. Prices shot up when controls were lifted, leading to one of the Gulf's highest inflation rates last year.

Kuwait now has the highest youth-unemployment rate in the Gulf, with at least one in six out of work. Citizens grumble about everything from potholes to the poor state of public education and health care. Perhaps they should pay to fix their own streets and schools: if they did it on credit, the state might pay them back. ■

South Africa

Fluent in empathy

UMNGENI

What a white, gay, Zulu-phonic mayor reveals about South African politics

ISIPHETHU SEMFUNDO is the only primary school for miles in the upper Mooi valley, a bucolic area in the midlands of KwaZulu-Natal (KZN), the second-most-populous South African province. It educates the children of the rural poor—or at least tries to. For a year it has had no clean water. Nor does it have state-provided transport for its pupils. This abruptly ended after officials were threatened by the owners of private minibuses who wanted the business. A few kids now walk; some cover 20km (12 miles) in a day. But more stay at home. Taking the minibus costs 450 rand ($28) a month, more than the 350-rand welfare grant given to the destitute.

The power of language

Running schools is the job of the province, which, along with the national government and eight of South Africa's nine provinces, is controlled by the African National Congress (ANC). But that has not stopped the mayor of the local municipality, Umngeni, from visiting. Chris Pappas (pictured) listens to teachers and mothers and says he will try to help. He does this in Zulu, the ladies' mother tongue, which he learnt while growing up on a farm. "Having somebody who can speak their language is very, very important," says Nene Philpine, the head teacher. "It gives a better and complete understanding."

Mr Pappas is an unusual politician. He is white in a municipality where three-quarters of residents are black. He is fluent in Zulu (it is rare to find whites who speak South African languages other than English and the Dutch-based Afrikaans). He is 31 years old, roughly half the average age of the country's cabinet. He is gay. And he is from the Democratic Alliance (DA), the official opposition, whose stronghold is in and around Cape Town. A year ago Mr Pappas became the first DA mayor to win an outright majority in a KZN municipality. His story is revealing—and encouraging—about the state of South African politics.

South Africans still vote largely along racial lines. The ANC usually wins a majority of the black electorate, while the DA takes most of the votes cast by the two largest minorities: whites and "coloureds", or mixed-race South Africans. Yet when South Africans irrespective of ethnicity are asked what matters most to them, polls suggest that they care more about jobs, corruption, crime and electricity blackouts than about race relations.

Mr Pappas's election in late 2021 shows it is possible for talented candidates to win support across the old divisions. Black voters in Umngeni, like those across the country, "feel betrayed by the ANC", he says. The mayor deliberately ran a "localised campaign" that promised tangible improvements but not "miracles". Though his narrow victory depended on DA voters turning out in relatively high numbers while many ex-ANC supporters stayed home, he also needed to lift his party's share of the black vote from 8.7% to 11.7%.

The success of Mr Pappas and his (black) deputy, Sandile Mnikathi, suggests that the monstrous damage caused by the ANC is reversible. Until the DA took over, the municipality had never run a budget surplus. Like most ANC-run local governments, its financial reporting was deemed inadequate by the auditor-general, a watchdog. Over the past year Mr Pappas has got Umngeni into the black by freezing hiring and stopping vanity projects. "There will be far fewer projects where politicians can go around and cut ribbons," Mr Pappas tells provincial officials. This is freeing up funds for new schemes.

One involves contracting out simple jobs, such as cutting the grass, to individuals. That sounds basic but it undermines the way ANC councils typically operate, awarding large tenders to politically connected cronies, often from outside the municipality, to get kickbacks. The municipality is also doing more to help the poor, for instance by making more households eligible for some free electricity.

The mayor's brand of politics is not flashy. But he argues that the simple act of doing what you said you would do is vital in a young democracy. "South Africans have lost faith in the democratic system as a means for change," he says. A poll in 2021 found that two-thirds of South Africans "would be willing to give up elections" if an unelected government could provide security, housing and jobs.

Mr Pappas's optimism is welcome. South Africans have been ground down by almost 29 years of ANC misrule. Black voters have become increasingly apathetic. Some have given up voting, while many whites retreat into their affluent bubbles. "That's the problem with South Africa," says Mr Pappas. "Four hundred people moaning on WhatsApp and no one doing anything." If modern South Africa's next big transition, from ANC hegemony to coalition governments, is to work, it will need more of this can-do spirit.

South Africa could also do with more whites who can speak African languages. When he was in prison, Nelson Mandela encouraged blacks to learn Afrikaans to understand "the language of the oppressor". Later, he saw it as an emollient gesture: when he spoke to Afrikaners in their language it went "straight to their hearts", he said. The power of language in politics is patent when you hear Mr Pappas conversing in Zulu. "The ability to listen [in Zulu] is more important than the ability to speak," he adds. In this age of populism, it is a valuable lesson. ■

Togo

A family business

LOMÉ

The president promises development, not democracy, but delivers neither

"DEMOCRACY IS THE best tool we have to address the wide range of challenges we all face, " President Joe Biden declared at a summit of African leaders in December, "and that belief is shared by Africans and Americans alike." Some guests may have struggled to keep a straight face. Among those attending were strongmen such as Paul Kagame, who has called the shots in Rwanda for almost 30 years, and Faure Gnassingbé (pictured), whose family has run Togo for 56 years. Although happy to offer platitudes about democracy in Washington in return for aid, at home both presidents are pushing an alternative model on their people: authoritarian rule in exchange for a promise of development.

It is a social contract that is increasingly popular among Africa's leaders. The Mo Ibrahim Foundation, which this week released its annual index of governance, found that more than 60% of Africans live in countries where democracy has declined over the past ten years. But in the same period measures of health care and economic development improved across most of the continent.

Both aspects of the deal are readily apparent in Lomé, an unusually sleepy city for a west African capital. Here a modern port and the occasional plush hotel or bank stand out from the unpaved streets that make up much of the city. "A half-century of the same family in power, that's too much," confides one Togolese man, who worries the government may punish him for speaking to a journalist. "They do not like that you tell the truth," he says.

Not that the truth is much of a secret. Ever since Gnassingbé Eyadéma, a former army sergeant, grabbed power in a coup in 1967, Togo has been a dynastic autocracy. After Mr Eyadéma's death in 2005, power passed to his son, who has clung to it as the security forces have killed and tortured his opponents and spied on citizens. It is "a state that surveils and punishes", says Expédit Ologou of Civic Academy for Africa's Future, a think-tank in Benin.

Togo's government and its supporters do not put things in quite those terms. Bigwigs speak of emulating Singapore or Dubai, where, they imply, the curbing of political freedoms ushered in stability and prosperity. Part of Togo's strategy is to show enough technocratic leg to woo Western governments that are keen to back a stable and seemingly competent regime in an unstable region. In this Togo seems to be following not Singapore but Rwanda, a poor dictatorship that combines some progress on economic development with a brutal security service.

Mr Gnassingbé has also followed Mr Kagame's lead in trying to build a reputation as a development visionary. He has poured money into upgrading Lomé's port, which has increased its container volumes by a factor of about five in a decade, albeit from a very low base, to become the region's leading hub. Now all the talk is of "digital transformation" and similar buzzwords. Cina Lawson, a Harvard graduate who is the "digital economy" minister, is trying to cut the cost of high-speed internet to attract startups. "Digital transformation provides us with a unique opportunity," she says. There is some action to go along with the talk. When covid-19 hit, the government quickly set up a scheme to send about $20 per month via mobile phones to vulnerable Togolese.

Yet the government's deal of development instead of democracy is one that most Togolese reject. More think the country is going in the wrong direction than the right one, according to Afrobarometer, a pollster. Fully 82% of Togolese think the constitution should limit the president to two terms and 68% think democracy is the best form of government. Just 17% support what, in effect, Togo has: one-party rule.

Even those sympathetic to the dubious idea that political repression goes hand in hand with development would struggle to make a Togo a model. After a half century of family rule it is much poorer than democracies in its neighbourhood such as Ghana and Senegal. "At least in Rwanda things have advanced economically," says Aimé Gogué, an opposition leader. "In Togo the population continues to suffer." ■

A Faustian bargain

African trade

Deals on wheels

KASUMBALESA

Why bicycles are crucial to Congo's cross-border trade

IN KASUMBALESA, ON the Zambian side of the frontier, lorries wait days to be let into Congo. Long delays at crossings are common across Africa. But in this border town in the north of the country some wheels are still turning. Rickety bicycles piled high with goods zip past the lorries, like river water flowing around boulders.

There are 4,000 to 8,000 bike "porters" in the town, estimates the World Bank. They load their bicycles with hundreds of kilos of goods, such as nappies, energy drinks and ground corn. A load that heavy would test the thighs of a Tour de France winner, so the cyclists work in teams. A "steerer" is seated at the front while three or four people push from the back. "My job is my work-out," says one. They dodge shoppers, goat herds and envious lorry drivers. Once out of Zambia, the goods are thrown onto a lorry before being resold, often in Lubumbashi, the nearest large city.

Congo relies on imports because, after decades of war, it makes and grows little itself. More than 70% of food consumed in its south-eastern provinces crosses the Zambian border, some of it bought at Kasumbalesa's market stalls, where French- and Swahili-speaking Congolese use sign language to bargain with sellers who speak English, Bemba or Gujarati.

Import tariffs are the same, no matter how the goods are moved. But bicycles save money and time. Fuel is expensive and it costs $400 in vehicle taxes for a round-trip from Zambia. It is also harder to evade bribe-hungry officials when driving a lorry than when riding a bike.

"Bicycles are the only way we can do business," says the owner of a firm that exports Namibian fish to Congo via Zambia. He once used lorries but delays meant his fish rotted. Today he uses Congolese middlemen who arrange the bicycle trade. Two-thirds of small-scale trade goes through the official border post; the other third is smuggled.

Kasumbalesa's two-wheel exporters hint at the importance of informal and small-scale cross-border trade in Africa. Indeed, the amount of unrecorded exports means that intra-African trade may be 11-40% higher than official figures suggest, notes the Brookings Institution, an American think-tank. When barriers to official trade are so high, entrepreneurs will find alternatives. Put another way: the peddlers will keep on pedalling. ■

Italy

Plain sailing for Giorgia Meloni

ROME

A perhaps surprisingly steady first 100 days

Few governments approach the end of their first 100 days in such good shape as Giorgia Meloni's right-wing coalition. In the run-up to that milestone on January 31st, Ms Meloni held convivial meetings with both Ursula von der Leyen and Pope Francis. These were seen in Italy as endorsements from the European Commission, which Mrs von der Leyen heads, and the Vatican—two organisations that Italian prime ministers always need to keep on their side. Then, on January 16th, came a different sort of gift for a government vaunting a tough line on law and order: police in Sicily nabbed Italy's most wanted man, Matteo Messina Denaro, a Mafia boss who had evaded capture for 30 years.

Despite having only ten weeks to do it, the government also successfully framed and steered through parliament a budget for 2023. And it claims to have met the conditions for the payment in the weeks ahead of a third tranche of grants and soft loans worth €19bn ($21bn) from the EU's post-pandemic recovery fund.

With all this going her way, Ms Meloni's party, the Brothers of Italy (FdI), has unsurprisingly gained in popularity, from 26% at the general election on September 25th to an average of almost 30% in the latest polls. Support for the main opposition Democratic Party has fallen over the same period from 19% to a dismal 16%.

Arguably, though, it is what has not happened since the right took power that is most telling: the markets have scarcely flinched at the advent of a government spearheaded by a party that traces its origins to neo-fascism and was once unabashedly Eurosceptic. The spread between Italian and German ten-year government bonds, a key indicator of concern over Italy's ability to service its debts, has narrowed. Since the new cabinet was sworn in, it has shrunk from 2.33 percentage points to around 1.8 points.

The change reflects an appreciation for Ms Meloni's budget, which envisages the deficit falling from 5.6% of GDP to 4.5% this year and 3.7% next. But it also reflects the perception that she has two strong reasons for sticking to the path of prudence. The first is Italy's giant public debt. By the end of last year, gross debt stood at around 145% of GDP. A second reason stems from the post-pandemic recovery fund. Italy is set to receive the largest share, almost €200bn. It is thus in the interests of the government to avoid spats with Brussels or its EU partners until the last euro has been disbursed. The government initially tried to block ships bringing rescued migrants to Italian ports. But when France pointed out that the move contravened Italy's treaty commitments, it backed down.

In other, less well-publicised areas, however, the thinking and behaviour of Ms Meloni's government are clearly at odds with Italy's European partners, and also with the commission in Brussels. Take digitalisation. With Europe's oldest population, Italy still ranks low (18th out of 27) on the EU's Digital Economy and Society Index. But over the five years to 2022 it

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showed the fastest improvement of any member state. In the previous government, under Mario Draghi, a former CEO of Vodafone, Vittorio Colao, headed a ministry for digital transition with wide powers to promote and integrate the use of digital technology in the Italian administration. Ms Meloni has dispensed with his services and handed the task to one of 17 departments in the prime minister's office, headed by a civil servant who, by his own account, has elementary English.

A similar aversion to the future surfaced in early drafts of the 2023 budget, which included a provision allowing shopkeepers and others to refuse card payments for less than €60. The proposal raised fears in Brussels that it could hinder efforts to combat tax evasion, and it was eventually withdrawn. But the final draft contained no less than 12 tax amnesties, as well as an increase from €2,000 to €5,000 in a legal limit on any cash transaction. These will hold back Italy's transition to a cashless society and make it easier for Italians to dodge taxes in future.

So far Ms Meloni has navigated relatively calm waters. But at least three dark clouds can be seen on the horizon. The first hangs over the recovery fund. It remains to be demonstrated that all 55 of the deadlines and targets set by the commission for the latest tranche have actually been met. And Italy's disbursement of what it has already received is way behind schedule.

Ms Meloni's boat could also be rocked by disunity within her coalition. The fear when she took office was that her two partners would balk at her support for sanctions on Russia and arms supplies to Ukraine. Matteo Salvini, the leader of the Northern League, was once a fan of Vladimir Putin. Silvio Berlusconi, who heads Forza Italia, still is. So far neither has dared to challenge the government's stance.

But an arguably more divisive issue has emerged: constitutional reform. For the FdI and Forza, that means the introduction of a semi-presidential system. For the League, it means greater regional autonomy—a reform critics argue would widen the already troubling gap between the richer north and the poorer south.

And then there is the third and scariest threat to the government's plain sailing: the ECB's plan to raise interest rates while tapering its bond-buying programme, a policy Ms Meloni and her ministers have repeatedly deplored. Italy's gross government debt as a proportion of GDP has fallen from the peak of 155% reached during the pandemic. But it is still quite enough to make Italy vulnerable to a sell-off in the bond markets if investors take fright at political instability or fresh economic disruption. Ms Meloni has so far proved to be an adept skipper. But even the best can find themselves at the mercy of the weather. ■

The next round in Ukraine

The Panzerwende

WASHINGTON, DC

Western tanks should greatly help Ukraine, but the stakes are rising

Each phase of the war in Ukraine brings its iconic weapons. Around Kyiv last winter the shoulder-fired Javelin anti-tank and Stinger air-defence missiles had starring roles. When fighting shifted to the eastern Donbas region in the spring, it was the 155mm howitzer. As Ukraine advanced in the autumn, plaudits went to the HIMARS rocket launcher. Now, as both sides prepare for new offensives, the spotlight has turned on the Leopard tank.

Russia still occupies about 17% of Ukraine's territory—including Crimea, the peninsula it annexed in 2014 and which poses some of the trickiest questions about the future of the war. Right now, the war has become one of static but bloody attrition. In the air, Russian missiles and drones seek to cripple Ukraine's electrical grid. On the ground, artillery barrages and human-wave attacks have allowed Russian forces to inch forward around Bakhmut.

The spring fighting season may prove decisive. Ukraine's edge in battlefield manpower is eroding, now that the Kremlin has mobilised 200,000-300,000 soldiers and may soon call up more. With Russia's arms factories working triple shifts, Ukraine cannot outmatch it in brute firepower, given the West's depleting stocks of arms. Ukraine needs a game-changing strategy. So America and its allies have shifted from providing weapons in piecemeal fashion to training and equipping entire armoured units for manoeuvre warfare. The aim is to help Ukraine not just repel the next Russian push, but to take back lost lands.

Leopards unleashed

In large military-aid packages this month, the allies first promised hundreds of infantry fighting vehicles and other armour—American Bradleys and Strykers, German Marders, French AMX-10RCs and Swedish CV90s. To create truly armoured units, though, Ukraine also needs lots of Western tanks.

These have proved unusually divisive. The tanks Ukraine most needs are German-built Leopards. Unlike the British Challengers, they are plentiful (about 2,000 Leopards are in service with Western armies). And unlike the American M1 Abrams, they are relatively easy to supply and maintain: they are powered by diesel engines rather than gas turbines. But to the growing fury of allies at home and abroad, the German chancellor, Olaf Scholz, held out against giving Leopards, or letting other countries supply theirs.

This obstacle was overcome on January 25th when America and Germany announced they would send 31 M1 Abrams and 14 Leopard 2 tanks respectively. Britain is sending 14 Challengers, and Poland a similar number of Leopards. Finland, the Netherlands, Norway and Spain may send Leopards, too.

Mr Scholz performed what tankies call a "pivot steer"—ie, spinning on the same spot to change direction. "Germany will always be at the forefront when it comes to supporting Ukraine," he declared. Yet he moved only with American covering fire. Having resisted sending the Abrams, President Joe Biden relented because, as one official put it, he was "extremely focused on the importance of transatlantic unity". Though strengthened, Ukraine now has an added headache in managing a bewildering variety of armaments. As important as the kit is the training which America is providing to improve Ukraine's combined-arms operations. This involves co-ordinating armour, infantry, engineers and drones in mutually reinforcing fashion.

One disappointment, says Ben Hodges, a retired general who used to command the American army in Europe, is the lack of longer-range precision weapons. The GPS-guided missiles fired by HIMARS can strike up to 84km away. Russia has pulled back its main command posts and logistics hubs to keep out of range. America refuses to supply the 300km-range ATACMS missile, fearing it could escalate the war.

The Pentagon concedes that Ukraine needs help to wage a "deep fight". But it is also withholding the Grey Eagle armed drone, not to mention military jets. Some had hoped for the deployment of a new HIMARS-launched missile known as a GLSDB with a smaller payload but longer range of 150km, but it has yet to be announced.

More and better armour, plus the

means to strike deeper, would allow Ukraine to aim for the "decisive terrain" of Crimea, says General Hodges. Ukraine could make an armoured thrust to sever the land bridge between Russia proper and the peninsula. With long-range munitions, meanwhile, it could destroy the actual bridge to Crimea over the Kerch Strait, damaged by an explosion in October 2022. Ukraine could then pound Crimea, making Russia's position untenable, he argues.

Being forced out of Crimea would be a devastating military and political blow to Vladimir Putin, Russia's president, which is why some allies fear it might push Mr Putin to use nuclear weapons. America asserts that "Crimea is Ukraine". Whether it would in practice support retaking the peninsula is another matter. Yet it may see advantage in Ukraine at least being able to threaten Russia's hold on Crimea in order to force it to the negotiating table.

Talk of reconquering Crimea is premature, argues Michael Kofman of the CNA, an American think-tank. Since their retreat from Kharkiv and Kherson last year, the Russians are defending a shorter front line with more soldiers and reserves. And both sides lack air superiority, a big part of Western combined-arms warfare. "If the next Ukrainian offensive goes poorly, it carries the risk of a Russian counter-offensive and, in the worst-case scenario, losing territory rather than gaining it," he notes.

The foreboding is palpable. "For this year it would be very, very difficult to militarily eject the Russian forces from every inch of Russian-occupied Ukraine," cautioned General Mark Milley, chairman of America's joint chiefs of staff, evoking a "very bloody war".

In Moscow, meanwhile, air-defence weapons have appeared on rooftops. Dmitry Medvedev, deputy chairman of Russia's security council, gave a grim warning: "The defeat of a nuclear power in a conventional war may trigger a nuclear war." His nuclear bombast was nothing new; but acknowledging that Russia could be defeated was novel and striking. ■

Germany's armed forces

A lost year

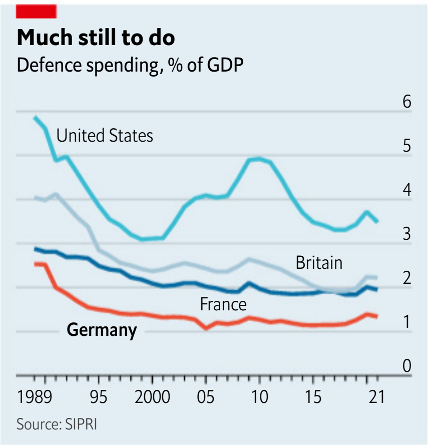
BERLIN

The state of the Bundeswehr is more dismal than ever

"THE BUNDESWEHR, the army that I am allowed to lead, is more or less depleted," wrote General Alfons Mais, chief of the German army, on the day Russia attacked Ukraine, in an emotional post on social media. "We all saw it coming and were not able to get through with our arguments, and draw and implement conclusions from the annexation of Crimea. It doesn't feel good! I am fed up!"

Almost a year after the general's much-noted post, Germany's armed forces are more depleted than ever, owing to the kit they are sending to Ukraine. Their stockpile of ammunition would last only a few days, rather than the 30 recommended by NATO. The radio equipment used by troops is 40 years old and analogue—and hence easy to intercept. Of its 350 Puma infantry fighting vehicles, just 150 are operational. The Bundeswehr does not even have enough Band-Aids, according to a report in December by Eberhard Zorn, the inspector-general of the armed forces.

For pundits and military personnel, the dismal state of the Bundeswehr is not news, but until Russia's attack on Ukraine Germany's leaders did not care enough to do anything about it. War in Europe seemed unthinkable. Political leaders watched the Bundeswehr shrivel to a force that could deploy several hundred men to help fight in international trouble spots such as Afghanistan or Mali but had lost its ability to defend Germany and fulfil its NATO obligations.



Much still to do

Defence spending, % of GDP

Source: SIPRI

A year ago it seemed that the shock of Russia's invasion would force radical and rapid change on the Bundeswehr. Three days after the attack, Olaf Scholz, Germany's chancellor, signalled to the world that Germany was determined to have a strong, cutting-edge army when he announced a "turning point" in parliament, which included establishing an extra fund of €100bn ($107bn) for the armed forces, twice the annual defence budget. He also promised to meet NATO's defence-spending target of 2% of GDP. "The speech hit us like a thunderbolt," says a senior German soldier. At last the armed forces would be a priority for policymakers.

Eleven months later, Germany's soldiers are again feeling frustrated. The Bundeswehr has so far seen little of the promised massive investment. Germany has ordered 35 F-35 fighter jets made in America that will replace its fleet of Tornados, but they will be delivered only in 2027.

After a series of gaffes, Christine Lambrecht, the defence minister, resigned on January 16th. She should have overseen a big reform of the armed forces but preferred to take baby steps. "We lost a decisive year," says Christian Mölling of the German Council on Foreign Relations, a think-tank, who thinks Mr Scholz was unaware when he made his speech of the full extent of the armed forces' problems.

The long-term malaise is such that the job of defence minister is known in Berlin as "career killer" or "ejector seat". Mr Scholz tried and failed to persuade a top politician to take Ms Lambrecht's job. Boris Pistorius, who was sworn in on January 19th, was previously interior minister of Lower Saxony. He was thrown into the deep end on his second day in his new job when he had to try to justify Mr Scholz's prevarications about sending heavy tanks to Ukraine.

Mr Pistorius will not have a moment to rest. He needs to rebuild the Bundeswehr and continue to help Ukraine while meeting Germany's NATO commitments, says Rafael Loss of the European Council on Foreign Relations, another think-tank. On January 1st Germany took over as leader of the Atlantic Alliance's Very High Readiness Joint Task Force. This includes 11,500 soldiers, more than half of whom are provided by Germany. Yet if the VJTF were to deploy, the German contingent would need to scrounge kit from other Bundeswehr units as it is so poorly equipped. It would be hard put to be operational within 48 to 72 hours, as NATO requires.

Germany has also pledged to make 30,000 fully equipped men and women available for NATO service by 2025. Experts doubt it can do this. The entire armed forces consist of some 183,000 men and women, compared with almost 500,000 at the end of the cold war, when West Germany spent almost 3% of its GDP on defence. Three decades of underfunding and an increasingly bloated bureaucracy have taken a heavy toll. But more than money is needed to fix the Bundeswehr. Soldiers—and their chief—must not feel fed up any more. Otherwise the armed forces will not attract the men and women to grow to 203,000 by 2032, as the plan demands. ■

Spain's economy

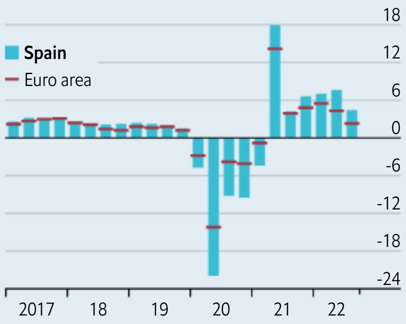
Bouncing back

MADRID

Despite cheerier news, chronic problems persist

It was the worst of times, then the best of times. In January 2022, an index by *The Economist*, ranking 23 countries' recoveries from the pandemic, put Spain in last place. The government criticised the index, while the opposition was bound to jeer.

A year later, a similar exercise put Spain in 4th place, and it was the government's turn to strut. And the flattering numbers continue to appear. Annual inflation, running at 5.6% in December, is the lowest in the euro zone, in part because Spain consumes little Russian gas. The main share-price index has made up most of its losses. The unemployment rate is the lowest since 2008, when the financial crisis burst a construction bubble. Tourism rebounded strongly last year.



For better and for worse

GDP, % change on a year earlier

Source: Eurostat

So on January 27th the country is expected to announce GDP growth of more than 5% for 2022; the IMF put the number at 5.2%. In 2023, the IMF forecasts growth of just 1.1%. But even that would still be ahead of the growth currently expected for the euro area as a whole. The news is well timed for the government led by Pedro Sánchez's centre-left Socialists. Spain holds local elections in May, and a general election at the end of the year.

The opposition People's Party (PP) argues that, international comparisons notwithstanding, things are objectively bad. GDP and consumption have been slow to return to pre-pandemic levels. With wage growth subdued, inflation has bitten into real incomes. The prices of prominent products are up by more than inflation—olive oil, which Spaniards use in great quantities, shot up by around 40% last year.

What the government can truly claim credit for, or take the blame for, should be the key question for voters. Last year's growth may be expected for a country that typically overshoots its neighbours' ups and downs. The modest growth expected in 2023, say analysts, is largely the result of the European Union's pandemic-recovery programme, of which Spain is the second-biggest beneficiary: it is getting some €77bn in grants, plus loans. Spain was quick to design its programme for the funds, but has been slow to spend them—thanks partly to its heavily decentralised government, says Nadia Calviño, the economy minister. The money should finally flow in earnest this year.

Once it does, Ms Calviño says it should support a virtuous circle. Productivity has grown feebly for two decades. The money is meant help change that, with public-private projects making high-value-added products like electric cars, and digitising small businesses and health care.

The most common criticism is that Spain's fiscal homework remains undone. Its tax-collection numbers are up, thanks to black-market jobs entering the licit sector during the pandemic, when being officially employed brought with it the ability to take advantage of aid programmes. But the structural deficit is still worryingly high—perhaps 4.5-5.0% of GDP, says Ignácio de la Torre of Arcano, an investment firm. The EU's deficit limit of 3% of GDP, suspended in the pandemic, returns next year. Pensions remain in deficit, with the general budget used to cover annual shortfalls of at least 1.5% of GDP, says Ángel de la Fuente of FEDEA, a think-tank. But few expect the reforms currently being discussed to be enough to make the system sustainable when Spain's younger-than-average baby-boom generation retires.

The opposition leads in most polls for now. The sunny economic news, provided it continues, will give the government a strong closing argument. But whoever wins the elections will not have long to enjoy their victory before needing to grapple with Spain's chronic problems. ■

Obesity in France

Body beautiful

PARIS

Even in the home of chic, obesity is on the rise

As haute couture fashion week got under way in Paris on January 23rd, the city of light was treated to the ritual display of fabric draped over skinny frames. In France the slimline silhouette seduces consumers off the catwalk too, year round, on billboards and in advertising spots. This body ideal persists, despite the fact that even in France obesity is on the rise. Between 1997 and 2020 the share of obese French adults doubled, to 17%, or 8m people.

France's obesity rate is still well below that in America (40%), Mexico (33%) or Britain (26%). But the trend worries French public-health officials, for reasons ranging from mental-health issues to weight-related conditions such as diabetes. The government has set up a task force on obesity, under Martine Laville, a professor of nutrition in Lyon. It will report back in March.

Obesity in France is most marked among those on low incomes, in the ex-industrial north-east and, perhaps surprisingly, among women (French men still have on average one of the lowest rates in the European Union). A poor diet high in processed food is one explanation for the income gap. According to a report by the French Senate, the obesity rate among manual workers in France reached 18% in 2020, whereas for managerial workers it is below 10%.

Living with obesity is particularly difficult in a culture that celebrates thinness. In 2017 France did ban the use of excessively thin catwalk models. "*Grossophobie* (fat phobia) hurts", said Marianne James, a talent-show judge weighing 138kg (304 pounds), who graced a magazine cover this week. But such images remain rare. One of the "singular achievements of French civilisation", wrote Mireille Guiliano, in a best-selling book in 2004, is that "French women don't get fat". Such claims now seem as unhelpful as they are untrue.

The enemy advances

Charlemagne | The ghost of crisis past

Experience from 2009 suggests Europe should shake off any complacency

CONSIDER THE start of 2009 and see if it sounds familiar. A swathe of Europe was wondering how to keep itself warm after Russia cut off gas supplies over a dispute with Ukraine. A global shock the previous year had threatened economic meltdown, but was starting to look manageable. Europe wondered how to respond to a vast subsidy programme designed to mollycoddle American carmakers without destroying its own single market. France's president demanded an end to unfettered free trade. A first-term German chancellor stood accused of putting national interest ahead of the European kind. Foreign policy wonks wondered how to engage with Russia in the wake of its attempts to invade its neighbour. Taylor Swift topped the charts. Recep Tayyip Erdogan looked to be dragging Turkey ever further from democracy. France was crippled by strikes. History may not repeat itself—but it can come pretty close.

Besides the antics of French workers, Mr Erdogan and Ms Swift—a feature of just about every year, not just 2009 and 2023—the parallels ought to be enough for European policymakers to study the events of 14 years ago. The conclusions they might draw are sobering. For the sensation of having narrowly averted disaster felt in early 2009 turned out to be misplaced. Europe thought it had weathered the effects of the global financial crisis. In fact it had plodded through the mere prequel to the more serious euro-zone miasma that ensued. In hindsight, the start of 2009 was a period when a bit more prevention might have prevented several years' worth of emergency late-night EU summits. If 2024 even half-rhymes with 2010, best to be worrying now.

A sense of smugness certainly pervades Europe once again. Warm weather has helped blunt the gas weapon Russia had hoped would prove decisive (unlike the case in 2009, when a cold snap had left much of eastern Europe shivering). Partly as a result, a recession that once seemed inevitable now looks less likely. Nor is there much of a sense of urgency around dealing with the war in Ukraine: witness how long it has taken to agree to send Kyiv tanks to take on Russia. Germany a year ago promised a *Zeitenwende*—a change in the spirit of the times—but has less to show for it than was originally expected. On the economic front, the EU's big idea is to neutralise a fresh dollop of American subsidies with a new fund designed to back European industry. But even an outline of what that will look like won't be revealed much before summer. Yet another summit of European leaders has been called for February 9th, the tenth in a year. But not much is likely to come out of it.

If 2023 is, like 2009, merely the eye of the storm, what horrors might await Europe on the other side? One depressing possibility is a variant replay of the euro-zone crisis. The flaws in the single currency that caused a run-of-the-mill recession to degenerate into something far graver after 2010 have never been fully addressed. There is still no permanent euro-zone budget to buttress economic shocks, nor a functioning banking union to prevent an ailing financial system from contaminating public finances (though banks themselves are safer). The once-a-century pandemic led to an exceptional downturn and a hugely costly stimulus in response. Nonetheless the financial tools for the currency bloc devised in the wake of the Greek crisis remain partly untested. Worse, the pandemic has left national governments laden with far more debt than in 2009. The European Central Bank has helped by snapping up lots of bonds issued by Italy and Spain, allowing them to borrow cheaply. But inflation is forcing it to move away from low interest rates. A year ago investors demanded less than 2% a year in interest to lend to Greece. Today they want over 4%. Fiscally prudent Finland has said it expects its borrowing costs this year to triple compared with 2022.

Having lived through it, policymakers are alive to a rerun of the euro saga and will have ideas on how to fend it off. More likely the next crisis will fall under the category of "things that will look obvious in retrospect" and could have been fathomed ahead of time. The mere possibility of an isolationist Republican winning the White House next year—either an ideological clone of Donald Trump, or the man himself—is one possibility. Having warned Europe that it should pay for its own defence once before, a Trumpian America will have even fewer qualms about putting itself first. The Biden administration pays lip service to Europe's travails as American green tax breaks threaten to suck investment and jobs across the Atlantic; an isolationist American will not even do that. Or take China. Mr Biden is trying to nudge Europe away from doing business with its geopolitical rival. A less diplomatically inclined president might pursue the same objective but not care much when it leaves Europe in the lurch.

Whatever shape Europe's next crisis comes in, it will be exacerbated by divisions within the bloc. After 2009 it was the German-led "core" pitted against the Club Med "periphery". The dividing line this time separates the eastern flank of the continent from the EU's original members in the west. Impatience has festered in Poland and the Baltics over the cautious approach taken by Germany and France in helping Ukraine. The feeling is mutual—and will be much worse if the war starts going Russia's way in the spring. That might spark starker disagreements within NATO, too.

The 14-year-hitch

Europe has not done a bad job of handling Ukraine, just as it once navigated the post-Lehman turmoil as best it could. But crafting complex compromises to handle crises at EU level tends to be time-consuming, if not downright exhausting. The prudent course is for more attention to be spent on looking beyond the immediate problem and dealing with what might ail the continent next, rather than assuming the worst has already passed. Railway crossings in France warn that "one train can conceal another". Much the same is true of crises. ■

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Carmaking in Britain

Pulling the plug

The age of electrification threatens the domestic automotive industry

The performance of Britain's car industry over the years has varied as much as the vehicles it has produced. In the 1950s Britain churned out more cars than anywhere except America; by the 1970s the industry was close to collapse. Six years ago it was purring like a Rolls-Royce: 1.7m cars rolled off production lines in 2016. Since then covid, Brexit and the rapid shift to battery power have made it look more like a Morris Marina. The country fell from 13th in the carmaking league table in 2016 to 18th five years later. Only 775,014 cars emerged from British factories in 2022, the worst year since 1956 (see chart).

Recent setbacks have added to the mood of pessimism. On January 16th Britishvolt, a battery startup once lauded by the government as a symbol of the electric-vehicle (EV) age, entered administration. BMW, the German owner of the Mini brand, confirmed in October that electric versions of the car would be made in China, and that its factory in Oxford would henceforth produce only petrol-powered cars. Shortly afterwards Arrival, a startup making electric delivery vans, said it would shift most of its operations to North Carolina.

Carmaking is an industry that directly accounts for 182,000 jobs and had a turnover of £67bn ($83bn; 3% of GDP) in 2021. But the chances of another revival in fortunes are ebbing, for three reasons: the globalisation of the car industry, Britain's withdrawal from the EU and, above all, its poor performance on electrification, the most profound shift in the industry since the advent of mass production.

The globalisation of the industry since the 1980s was good for Britain. Japan's Toyota and Nissan set up shop locally and other foreign firms snapped up the best British brands. All were keen to take advantage of domestic engineering prowess, flexible labour laws and membership of the EU, which made the country a useful base for exports. Some 80% of cars still go abroad, over half to Europe.

But globalisation also made Britain's position fragile. It is a middling European production outpost for giant global firms making dispassionate investment decisions far away. That makes it vulnerable to any government policies that reduce its allure. Brexit was that writ large. In 2021 Honda ended manufacturing in Swindon, where it had made 150,000 cars a year, a decision announced after the vote to leave the EU. Despite a free-trade agreement for the industry, Brexit has added reams of paperwork for cars and parts that criss-cross the English Channel and made it harder to bring in foreign managers.

Brexit uncertainty has also stymied investment at a crucial moment for the industry, says David Bailey of Birmingham University. Britain has not entirely lost out in the switch to battery power. Ford said in December that it would spend another £150m to make EV components at Halewood on Merseyside, taking its total commitment to £380m. Stellantis, owner of Vauxhall, is spending £100m to convert its plant at Ellesmere Port in Cheshire so that it can churn out electric vans. Most significantly, Nissan and Envision, its Chinese partner, are spending £1bn to build a "gigafactory" in Sunderland that will start to produce batteries in 2025 for British-built EVs . But in a restructuring of an industry that will spend $1.2trn globally by 2030 on electrification these are trifling sums.

For global firms to choose Britain as a place to make EVs the country needs a battery industry. As the Faraday Institution, a battery-research body, puts it, "without large-scale UK battery production, domestic vehicle producers would gradually wind down". Importing batteries is not impossible—Mini has done so and Vauxhall plans to do the same—but this is a second-best solution. Batteries are bulky, critical components. For manufacturing efficiency and resilience, "just down the road is always better", as one insider puts it. There is a "big question over a large industry without gigafactories", says Mr Bailey.

Britain has some long-term advantages, including cheap and clean energy from the North Sea. But more than 40 gigafactories are already up and running or planned in Europe, either by startups or via joint ventures between carmakers and the battery giants of China, Japan and South Korea. So far Sunderland is Britain's only one.

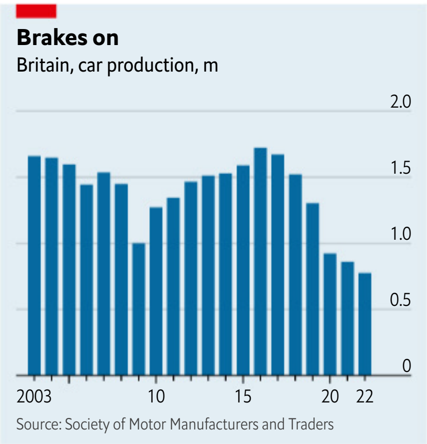
Jaguar Land Rover (JLR), a maker of posh motors owned since 2008 by Tata, an Indian conglomerate, has plans to make EVs in Solihull from 2025. It is thought to be in talks with the government over sweeteners that might persuade it to build a gigafactory in Britain. But it could be induced to locate elsewhere. Toyota, which assembles vehicles in Derbyshire and makes engines in Wales, mainly makes hybrids, which require only small batteries. It has six other plants across Europe that might be better served by a new gigafactory.

As for the prospect of startups establishing gigafactories, the question is whether established carmakers will trust new firms to supply a component that comprises around two-fifths of the value of an EV. Britishvolt, whose lack of customers contributed to its downfall, shows the difficulties. One startup that hopes to make batteries in Coventry has no investors so far. In contrast Northvolt, a startup that has already begun making batteries in northern Sweden, has investment from Volvo and Volkswagen, among others.

It doesn't help that other countries are striving to attract EV investments. Government support is more forthcoming in France, Germany, Italy and Spain, perhaps because they are still home to huge firms. They also have "much clearer investment and industrial policies", according to Matteo Fini of IHS Markit, a consultancy. America's recent Inflation Reduction Act is handing out dollars to lure investment—the reason for Arrival's departure. British government funds are spread around central and regional bodies, making them harder to access than elsewhere.

The clock is also against Britain. The EU will stop the sale of internal-combustion-engine cars by 2035; in Britain the deadline is 2030. Under rules-of-origin requirements negotiated as part of the post-Brexit free-trade deal for cars, 55% of the value of components in cars exported from Britain to Europe will have to originate in either place by 2027 to avoid 10% tariffs.

There are pockets of cheer. Engineering excellence has attracted many Formula 1 and other motorsports teams. World-renowned skills in battery science and other EV technology have persuaded many foreign carmakers to set up R&D hubs in Britain. High-end, tiny firms for whom Britishness is a vital part of their brand, such as Rolls, Bentley and Aston Martin, are sure to stay. But mass manufacturing faces a tough future. If a big firm decides to follow Honda and leave, the rise-and-fall pattern that has characterised British carmaking could become a downward spiral. ■



Source: Society of Motor Manufacturers and Traders

Architectural preservation

In the good times

SWINDON

A surprisingly fierce movement to protect 1970s leisure centres

"YOU NEED to use your imagination," says Otto Saumarez Smith, an architectural historian. The Oasis swimming pool and leisure centre in Swindon closed in 2020 and is now drawing graffiti taggers and weeds. But when it opened, in 1976, it was a steamy tropical paradise with trees and slides under a bravura 45m-wide glazed dome.

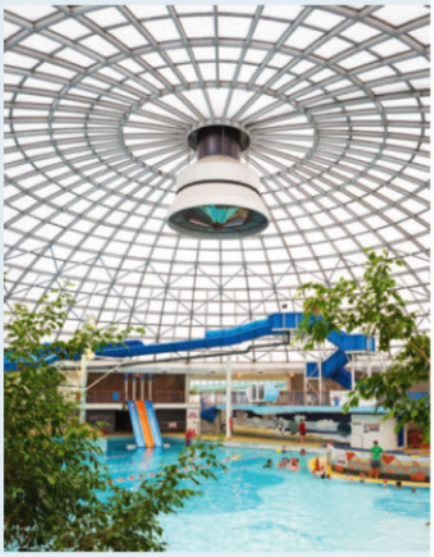
In 2021 the Oasis became the first leisure centre to be protected by Historic England, which noted the odd fact that a rock band from Manchester, more than 200km (124 miles) north, is named after it. A second 1970s leisure centre, in Bradford, was protected last year. The Twentieth Century Society, an architectural-heritage charity, is campaigning to save ten other structures, including the dome in Britain's first Center Parcs resort. It says that several are being assessed.

The society hopes to repeat the success of a campaign that began in 1991 to save open-air swimming pools known as lidos. Both types of building involve water, but are otherwise entirely different. With their cold water, uncomfortable changing rooms and art-deco styling, lidos preach the virtues of exercise. The indoor leisure centres of the 1970s and 1980s were about family and fun.

Their pools were curvy and fringed with trees. You walked into the water via gently sloping beaches; the leisure centres' architects had discovered that many Britons could barely swim. They had wave machines and waterslides, and some served alcohol. Their designers aimed to bring the Mediterranean to ordinary Britons. As Britons took to holidaying in the actual Mediterranean, some began to decline; austerity and covid-19 finished them off.

But not all have been demolished, because local people have fought hard to protect these tacky temples. In December a group pushed Cornwall County Council to relinquish control of a leisure centre known as Ships and Castles, which had been slated for demolition. People associate leisure centres with fun memories and want to preserve them more than, say, a modernist housing typology.

They are tricky buildings, admits Mr Saumarez Smith. In environmentally conscious times it is harder to justify heating a giant glazed bubble. Whereas only the roof of the leisure centre in Bradford is protected, in Swindon the pool is too, so it could probably only be used as its architects intended. Neil Robinson, who led the campaign to protect the Oasis, dearly hopes it will reopen. He has switched to another pool, "but it's just boring lane swimming".



Paradise in Swindon

Bagehot | Britanskii blat

In a land of queues, lessons in the Soviet art of getting by

After Britain's covid-19 shutdown, waiting times at driving-test centres rose to over six months. Where there are bottlenecks, there is potential for profit. Enterprising sorts created a lucrative secondary market: they built online bots to hoover up scarce test slots, and then sold them on to impatient candidates. The Driver and Vehicle Standards Agency promised a crackdown, but several of these intermediaries still seem to be in business.

Gregory Grossman, a famed Sovietologist, would have recognised these *speculanti* and the shortages on which they thrived. Propaganda might have presented the Soviet command economy as centrally planned, regimented and thoroughly socialist. In reality, Grossman said, there was a flourishing "second economy" of capitalist entrepreneurship, ranging from the ideologically unsound to the outright criminal. Peasants sold food from private plots; tradesmen moonlighted; shadow factories pumped out televisions for the black market. The whole system was lubricated by *blat*, or the "economy of favours". In a land of queues, getting hold of a fridge, theatre tickets or a better apartment relied on a network of contacts, cunning and petty bribery.

Grossman's work is a useful way of understanding some of what is happening in Britain today. Universal public services are the closest Britain has to a state ideology. The NHS flag flies from municipal buildings; nurses will sing in the coronation choir later this year. But queues abound: hours for an ambulance, months for a visa, years for a criminal trial. And so a second economy thrives.

For the better off, there are private options. Demand has jumped for one-off private medical procedures, particularly on knees, hips and cataracts. There is a nascent market in private emergency ambulances and in private police forces to patrol neighbourhoods. Private prosecutions are making a comeback. All of this is legal and rational, though not something politicians will rush to admit. Rishi Sunak has confessed to having "used independent health care in the past" with the tone of a Politburo member atoning for a collection of Gucci loafers.

There are kitchen-table remedies that do not require going private. On Mumsnet, a web forum, mothers trade tips on securing an appointment with their family doctor: queuing on the pavement before dawn, sobbing into the intercom or downloading an autodialler to bombard the booking line. Some eastern Europeans in Britain combine trips home with medical appointments.

And for the better-connected, there is *blat*. The middle classes have long exploited the rule book and the lexicon of the bureaucrat to secure school places or medical treatment, notes Annette Hastings of the University of Glasgow. What has changed is the intensity of effort required to secure the most ordinary services. Contacting your MP used to be a last resort and is now a means of doing business: the passport office received 11,000 complaints from MPs in a six-month period last year.

Blat dictates that to unlock health treatment, it is worth tracking down the consultant's secretary. If you want a crime to be investigated, the detective's mobile is far more useful than a crime reference number. Privatised utilities offer a particularly lousy service but they are sensitive to criticism from people with clout. At least one water company operates a second, unadvertised call centre for resolving VIP complaints that reach the CEO's desk.

Covid-19 was a breeding-ground for *blat*. The NHS fraud watchdog suspects that jabs and vaccine passports were sold on the black market by staff. A shortage of protective equipment meant rewards for middlemen who could supply the government. The Soviet fixers who helped factory managers get essential supplies were called *tolkachi*. In England they are known as Tory donors.

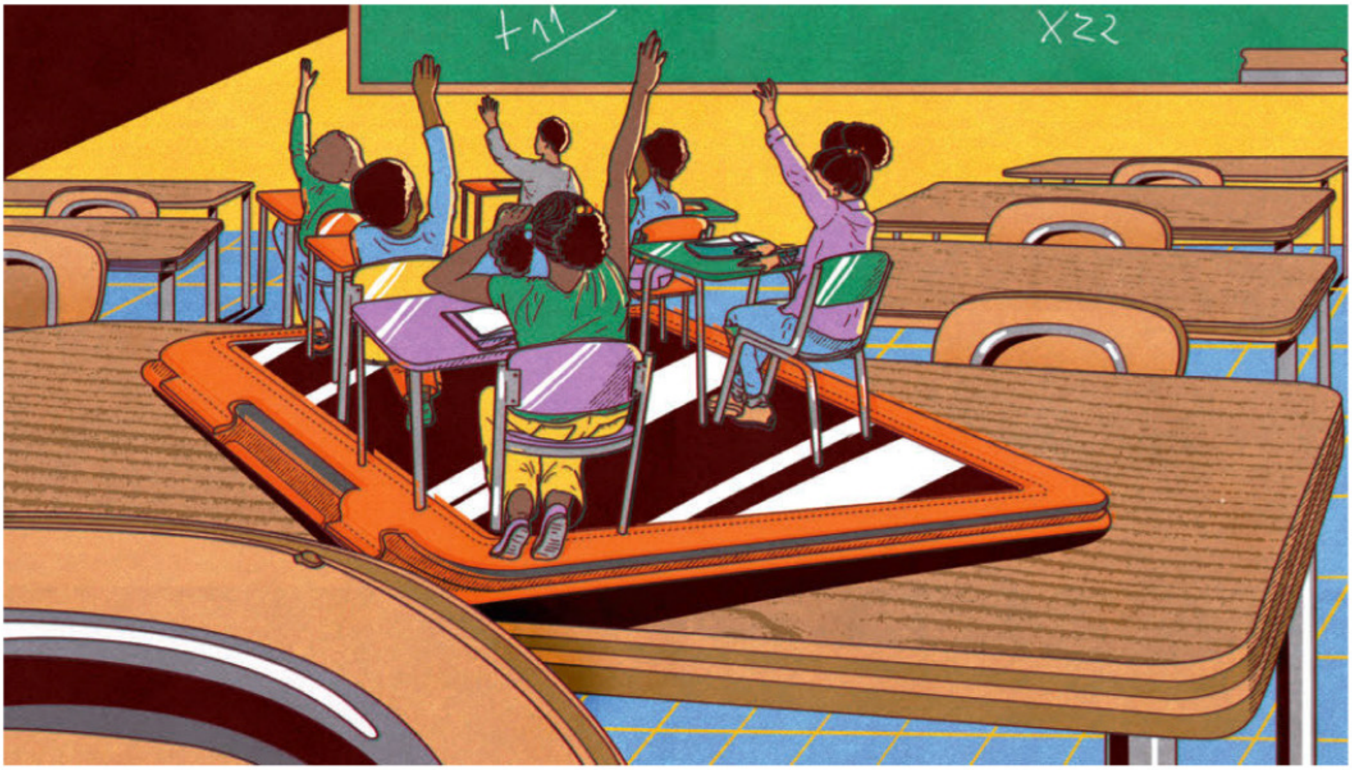
The second economy in the Soviet Union ran on corruption, "beginning with the pay-off for a good room in the obstetric ward, ending with a pay-off for a quality burial plot", as Steven Sampson, an anthropologist, put it. To the extent Britain is vulnerable to graft, it is because of bottlenecks. Government policy creates an acute mismatch between supply and demand for land, for example. Transparency International, a campaign group, sees a risk in the councillors and former officials who can be employed as "consultants" on planning decisions.

If bribery remains comparatively rare in Britain, that is in part due to a proliferation of licit fast-track schemes. NHS hospital trusts are allowed to make half of their income from private patients' units that are often attended by the same doctors. A hundred quid will secure a private room on a maternity ward (though not, Bagehot can attest, a better breakfast). This month the Home Office has created a priority service for those already in a queue for visas to join family members in Britain, which now stretches to six months, twice its target length. For an extra £573 ($704), the paperwork will be delivered in three weeks. A fast-track scheme that turns a gridlocked service into a merely late one is very Soviet.

Seeing red

The second economy helped prolong a failing system. A supply of jeans and American records mollified a restless Soviet public, disguised the inadequacies of the command economy and dulled the pressure for reform. Even the worst bits of Britain's public services can be made tolerable for those with money or bureaucratic cunning. It is more productive to pay up or pull strings than to protest.

But it is also corrosive. *Blat* compounded the inefficiencies of the Soviet system and rendered its boasts ridiculous. It does the same in Britain. Nine in ten dentists have no space for new NHS patients, yet the NHS website boldly declares that it will "provide any clinically necessary treatment needed to keep your mouth, teeth and gums healthy and free of pain". This is fiction fit for a May Day banner. *Blat* is a declaration of distrust in a system that only sometimes does what it promises. To queue is to be taken for a fool. Better to shed that English reserve, and push to the front. ■



Teacher training

Education in a can

BENIN CITY

Children learn too little at too many schools. Tightly scripted, pre-baked lessons could help

“Good job you!” shouts Pauline Bika, as a group of schoolchildren completes the hokey-cokey. “Good job me!” choruses her class. Ms Bika runs a small government primary school in Edo state, in southern Nigeria. It is reached by a mud track that starts not far outside Benin City, the state capital. Her school has 140 pupils, but only three teachers. She seems both pleased and a little embarrassed to offer a visitor a plastic chair.

For all that it lacks, Ms Bika’s school has one advantage. At the start of last year the state education ministry gave each of her teachers a small tablet with a black-and-white touch screen. Every two weeks they use it to download detailed scripts that guide each lesson they deliver. These scripts tell the teachers what to say, what to write on the blackboard, and even when to walk around the classroom. Ms Bika says this new way of working is saving teachers time that they used to spend scribbling their own lesson plans—and her pupils are reading better, too.

That is sorely needed, for much of the education given in much of the world is strikingly bad. Across the developing world many schoolchildren learn very little, even when they spend years in class. Less than half of kids in low- and middle-income countries are able to read a short passage by the time they finish primary school, according to the World Bank. Across sub-Saharan Africa, as few as 10% can (see chart on next page). Experiments like those under way in Nigeria mark one attempt to improve things. They also face fierce opposition from critics who are convinced they mark a wrong turn.

The reforms in Edo began in 2018. Godwin Obaseki, the state governor, says that poor schools are one reason youngsters have often left the state for greener pastures (some fall victim to people-traffickers promising better lives in Europe). Since then, the government has provided tablets and training to more than 15,000 teachers. They in turn have given the new lessons to more than 300,000 children, most of them in primary schools. On any given day pupils throughout the state receive identical lessons, as dictated by the tablet.

The training and technology are provided by NewGlobe, an education company founded in 2007 by three Americans (Pitchbook, a data firm, valued the company at $250m following a funding round in 2016). NewGlobe developed its approach while running a chain of low-cost private schools, mostly in Kenya, under the brand “Bridge International Academies”. A study by academics including Michael Kremer, a development economist at the University of Chicago, found that, over two years, children who attended NewGlobe’s primary schools made gains equivalent to almost a whole year of extra schooling, compared with their peers in other schools.

F is for factory

Though Edo was the first state in Nigeria to strike a deal with the firm, NewGlobe’s approach has since also been applied in Lagos, the country’s biggest city. The firm is starting work in Manipur, a state in north-eastern India, and in Rwanda. Around a million children are now studying in classrooms that use NewGlobe’s model—far more than its private schools have ever been able to reach.

Although it seems able to find plenty of clients, the company provokes ferocious arguments among educators. Its private schools have long faced energetic opposition from trade unions and some international NGOs, many of whom hate the idea of profit-seeking companies playing any role in education. Others resent the application of mass production to what they see as a skilled, artisanal profession.

▸▸

Dennis Sinyolo of Education International, a global group of teachers' unions, says scripted lessons "undermine teaching" and encourage "rote learning and exam drilling". He says good lesson plans are written to match local contexts, and the needs of individual students. The freedom to change tack mid-lesson is invaluable if a lesson plan is not working. "There's no one-size-fits-all in teaching," he says.

Visits to schools in Edo provide some perspective on what is going on. There are doubtless many ways to teach a scripted lesson badly. But the idea in Nigeria is that they will tend to make classes more compelling. The scripts enforce instructional practices that are routine in many rich-country classrooms but often neglected in poor ones. These include techniques such as pausing frequently to pose questions to the class, instead of delivering long lectures at the blackboard, or encouraging pupils to try to solve a problem by chatting to the child sitting next to them.

Detailed, prescriptive lesson plans are also supposed to relieve teachers of the burden of having to write their own. That, advocates hope, will leave them more energy for other jobs—such as making sure their charges stay engaged. Teachers in Edo have been trained to lead their classes in short games and songs whenever they think pupils have grown restless (hence the hokey-cokey). Ms Bika says things are better than in the past. Before, bored children would occasionally wander home during the day. Inattention was sometimes punished with the cane.

The changes do more than alter teaching styles. A study published in 2010 estimated that on any given day around a fifth of Nigeria's primary school teachers were absent from their classrooms. Earlier research suggested as little as one-third of class time is used productively. In Edo, tablets register when teachers arrive. They can tell if a teacher has scrolled through a lesson faster than appropriate, or if they have abandoned one halfway through. Beneath lies a low-tech foundation: a team of officials—about one for every ten schools—that observe lessons and coach teachers, helped by data from the tablets.

The depth of its scripting and the whizziness of its tablets set the work in Edo apart from many other attempts to improve schooling. But the programme has things in common with a broader family of reforms burdened with the clunky name of "structured pedagogy," most of which are less controversial. This argues that isolated splurges on goodies such as textbooks often fail to bring benefits. Making big improvements seems to require pulling several levers at once. So the idea is both to give more materials to pupils and better lesson plans to teachers, alongside fresh training and frequent coaching.

In 2020 a panel convened by the World Bank and other bodies concluded that these are some of the best things education reformers can spend money on. In the past few years the approach has been applied in Gambia, Ghana, Nepal and Senegal. One programme in Kenyan government schools helped push up the number of children reaching the national standard in English by 30 percentage points.

E is for everywhere

But it is not only in poor countries where tightly structured approaches to schooling are gaining a following. In America, for example, there is growing awareness that schools have been clinging to modish but ineffective "child-led" ways of teaching reading that other developed countries such as Britain have junked. Literacy programmes that were dismissed as old-fashioned are coming back into favour.

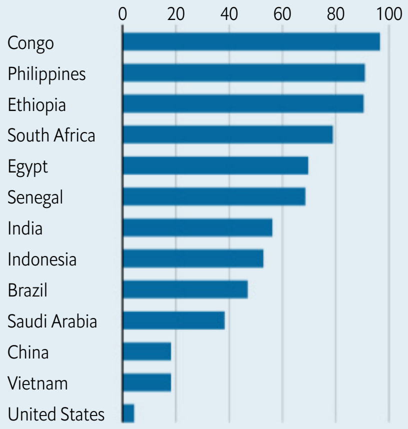
McGraw Hill, an American publishing company, sells a series of highly scripted courses aimed at primary-school children. Bryan Wickman of the National Institute for Direct Instruction, a charity in Oregon, says that using the simplest, clearest language possible is crucial when teaching the smallest children. He says the idea that lessons based on scripts must inevitably bore children should surprise anyone who enjoys other things that are performed from scripts, such as plays.

Success For All, a programme used in some British and American schools, puts much faith in "co-operative learning"—which involves encouraging children to solve problems together in small groups. But much else that goes on in its classrooms is structured and scripted. Such prescriptiveness helps teachers adopt techniques that research suggests work well, says Nancy Madden of Johns Hopkins University, one of Success for All's creators. These include giving pupils quick and frequent feedback and keeping up a rapid pace to keep children interested.

There are no words

Children who cannot understand a simple text by age ten, selected countries, %

2019 or latest available



Source: World Bank

Ms Madden says teachers who have grown familiar with her programme's techniques are not expected to keep following scripts to the letter. But when, in the past, her team relied mostly on training workshops to spread their approach, they found that only a fraction of teachers kept up the new practices once they were back in their classrooms.

She admits that teachers sometimes bristle at the constraints that scripts impose: "It is not what they teach you in teacher school." Sceptics often come round, she says, when they see kids making swift progress. Mr Wickman points out that other expensively trained professionals, such as pilots and surgeons, also have procedures that they must follow to the letter. After some initial complaints (similar to those expressed by dubious teachers) such regimented approaches have become widespread in those fields. They help reduce mistakes, and spread better ways of doing things.

Back in Edo, Mr Obaseki's transformation still has plenty to prove. An analysis published in 2019 by the state government and NewGlobe claims that during the first year of the reforms children learned as much in a single term as they were previously learning in one year. But the project has yet to undergo a rigorous independent evaluation. Much of the existing evidence that supports scripted schooling relates to basic literacy and numeracy among the youngest children. In Edo, lesson scripts are being used to teach almost every subject, and are being applied to teenagers in junior secondary schools.

Whether strict scripting is necessary remains a topic of debate. (The World Bank panel, for instance, argued that word-for-word scripts are less effective than simpler guides.) In 2018 RTI, an American non-profit group, analysed 19 school-reform efforts it had been involved in across 13 countries, including Ethiopia and Uganda. It concluded that programmes with slightly less prescriptive guides—a page of notes per day, say, rather than a full-on script—produced better results. Advocates of a more relaxed approach say another advantage is that leaving teachers with a bit of freedom to tinker can help win their support.

Yet Edo's approach appears to have persuaded most local teachers of its worth. Mr Obaseki, the state governor, says school staff had long felt ignored and unappreciated; he says that providing more training and equipment has brought fresh motivation. He insists that support for the project among unions was crucial to his re-election, in 2020. It has, he says, been "one of my best investments". ■

Kumano Kodo Pilgrimage Routes

The art of living well in Japan

Time-honoured experiences that will carry you from where you are to where you're meant to be

Japan is a dynamic destination, one where you can immerse yourself in the organised chaos and vibrant streetscapes of one of the world's great cities, Tokyo. But it is also a place where you can elect to leave all of that behind, and instead seek out experiences that contribute to a greater sense of well-being and a more connected, centred sense of self. This could mean following trails into the mountains laid by mountain ascetics well over a thousand years ago, soaking outdoors in natural hot springs, or waking up to dewy vistas of rice paddies and forested hills.

While nature is an obvious place to seek sanctuary, it can be found, too, in Japan's man-made environment. Travel to Enoura Observatory, an expansive space designed by artist Hiroshi Sugimoto, or to the island of Shikoku, where contemporary architect Kengo Kuma has designed several wooden structures that blend in harmoniously with the natural environment. Then there's the food, and the numerous opportunities to taste the sublime: sample an ancient form of sushi on the shores of Lake Biwa at Tokuyamazushi, or a multicourse meal inspired by Japan's traditional organic farming culture at Tokyo hotspot NARISAWA.

Wellness and nature

Japan is full of awe-inspiring landscapes: metaphorical 'seas' of clouds settling among forested peaks; perfectly formed volcanic cones, iced with snow; and waterfalls plunging over dramatic cliffs, to name a few. Some are so awe-inspiring that they were viewed by ancient Japanese as sacred—a feeling that lingers to this day. For over a millennium, ascetic monks called *yamabushi* headed deep into the mountains, practicing austerities in the wild in search of enlightenment. The tracks they laid became pilgrimage routes, some of which still exist.

One example is Kumano Kodo, one of only two UNESCO-listed ancient pilgrimage routes in the world. Located on the remote Kii Peninsula, the trails run through ancient forests, past rivers and hot springs, connecting three temples that mark historic sights of nature worship. Once a sacred pilgrimage reserved for emperors and samurai, the Kumano Kodo is open to all wanderers today. It presents a spectacular opportunity to disconnect from modern life and seek something more transcendent.

So, too, is a stay at Sasayuri-Ann, deep in the mountains of Nara prefecture. Overseen by ascetic monk Tetsuji Matsubayashi, Sasayuri-Ann is composed of traditional wooden villas with thatched roofs and pine floors. Here, guests sleep on 'futon' bedding laid out on tatami straw mats, delighting in the tranquillity of the landscaped gardens and views beyond of the mountains and rice paddies spread out below. There are old *yamabushi* trails near here too. You can trek around the Akame 48 Waterfalls—voted the most beautiful waterfall landscape in Japan—and you may even see some modern-day ascetics clothed in traditional white robes.

Wellness and culture

Japan's traditional culture has long been shaped by the country's natural environment. Take architecture, for example: in a country with abundant forests, wood has long been the principle construction material, and carpentry an ancient art form. Kengo Kuma is one of Japan's leading contemporary architects, and a strong proponent of traditional design and materials. His works are noted for their use of wood, seen in his design for the new National Stadium, built for the recent Tokyo Olympics and also in his works for Yusuhara, a small town in the mountains of Kochi prefecture on the island of Shikoku. Since the 1980s, Kuma has designed six original structures for Yusuhara. Taking inspiration from the town's natural surroundings and history as a logging town, Kuma's designs incorporate cedar, thatch, and traditional carpentry techniques. While the buildings are unmistakably modern, they also have a distinctly Japanese feel, fitting naturally into Yusuhara's lush, forested landscape.

Another example of art and architecture blending in with and enhancing the natural environment is Enoura Observatory, perched on a hilly citrus grove in the Hakone Mountains not far from Tokyo. It's a project conceived by Hiroshi Sugimoto, a NYC-based contemporary artist. The complex—which includes a gallery, open-air theatres for noh (an ancient Japanese performing art) and a re-imagined traditional teahouse and gardens—makes use of the traditional building styles and methods at which local artisans have long excelled, preserving them for future generations. But there is also a contemporary edge. For example, one stage is made of glass atop a wooden framework while another is of stone. Each element is designed for interaction and harmony with the site's natural surroundings, resulting in a stunning piece of architectural art—complete with panoramic views over Sagami Bay.

Yusuhara+Town+Library

Optical Glass Stage and Winter Solstice Light-Worship Tunnel
©Odawara Art Foundation

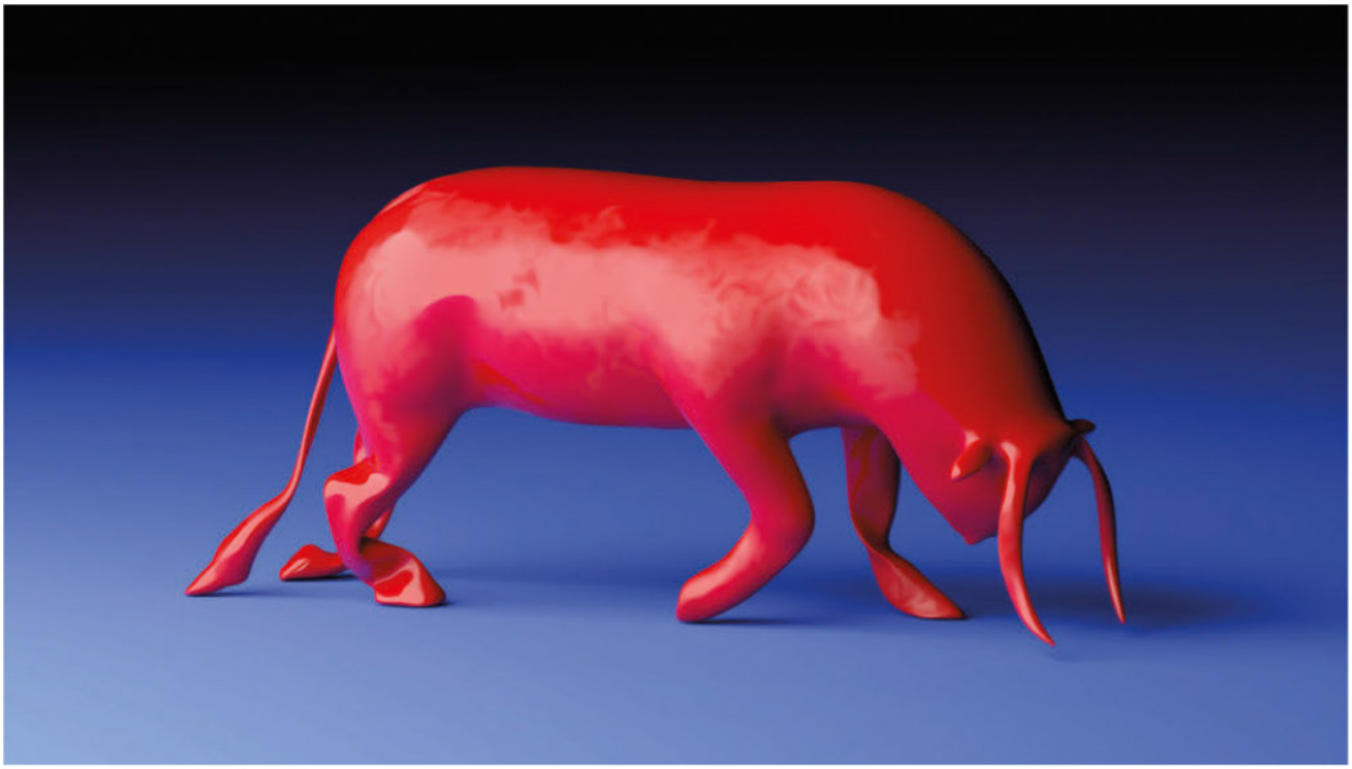
Wellness and gastronomy

Japanese cuisine is so much more than just sushi and ramen. Recognised by UNESCO as an example of humanity's intangible cultural heritage, *washoku*—Japanese cuisine—is, at its heart, about eating seasonal, local ingredients produced in harmony with the environment. Renowned chef Yoshihiro Narisawa, whose Tokyo restaurant regular ranks among the best in Japan, has built his reputation around the concept of *satoyama*. In Japanese, 'satoyama' refers to the place where the fields meet the mountains—a common setting in country with an abundance of peaks—and a historically no-waste pastoral lifestyle that is as much about growing food and foraging as it is about tending to the natural environment. The result is signature dishes like 'Soil Soup 2001', which seeks to capture the very essence of terroir (it's made from burdock root).

While NARISAWA is an example of contemporary *washoku*, there are also restaurants in Japan that continue to honour age-old culinary traditions, like fermentation. The emphasis on freshness in sushi is a fairly modern one; historically, sushi was a means of preserving seafood through fermentation. At the northern tip of Lake Biwa, Japan largest lake, lies tiny Lake Yogo, and on the edge of this clear lake sits Tokuyamazushi, one of the last practitioners of an ancient fermentation method called *narezushi*. Chef Hiroaki Tokuyama packs fresh fish from Lake Yogo in steamed rice, leaving the mixture to ferment at a constant, cool temperature for months. Once completed, the *narezushi* is rinsed in cold spring water, thinly sliced and served on fresh rice. The flavour is a brilliant surprise—bright, clean and surprisingly mild, with a soft cheese note.

Japan. Endless Discovery. JNTO

www.japan.travel/en/luxury



Big business

Bulldozed

America Inc is in for a rough earnings season

CHIEF EXECUTIVES of the world's biggest firms seem in highish spirits of late. Although they see the war in Ukraine as a humanitarian tragedy, the risks to the world economy look for now to be contained. Central banks have got serious about inflation. The world economy has held up better than expected a few months ago (see Finance & economics section). China's Communist government has launched a charm offensive, signalling that the country is not just reopening after its harsh "zero-covid" regime but also reintegrating with the world. Globalisation may not be in the rudest of health, but news of its demise appears, to many bosses, exaggerated.

The mood in corner offices may be about to sour. "Earnings season is going to be the confessional event," says Jim Tierney of Bernstein, an investment firm, referring to the month or so when most companies report their quarterly results. The profits of America's banking giants, which kicked things off earlier this month, fell by 20% year on year. Investment bankers got a particularly severe drubbing, as dealmaking collapsed amid economic uncertainty. Goldman Sachs is giving around 3,200 of its workers the boot.

By January 25th titans of other industries, from manufacturing (3M and Boeing) to consumer goods (Kimberly-Clark) and technology (Microsoft), had reported soggy earnings. Profit estimates for large American firms are plunging. In the last three months of 2022 analysts revised their fourth-quarter earnings forecasts for the S&P 500 index down by 6.5%, twice as much as the typical downward revision. Wall Street's collective wisdom about the past quarter points to the first year-on-year decline in profits since the depths of the pandemic in 2020 (see chart on next page).

For many companies, costs are rising faster than sales. Businesses are discovering that it is harder to resist wage rises than to persuade customers to bear higher prices. This is likely to compress margins at a rate that has yet to be fully digested by analysts, who collectively cling on to the prediction that profits will grow in 2023. If the American economy does slide into a recession, as many economists expect, overall profits will almost certainly decline. Since the second world war earnings per share have fallen by an average of 13% around periods of economic contraction, according to Goldman Sachs.

The first thing to which firms will be confessing is the weariness of consumers. In firms' conference calls with analysts at the end of last year, many spoke of weak demand, as shoppers reined in spending on discretionary items. Procter & Gamble, whose products range from nappies and detergents to dental floss, has reported falling sales volumes across its businesses in the fourth quarter. It managed to meet earnings expectations only because it increased prices by 10%—and plans further rises in February.

Yet the chorus of bosses advertising such "pricing power", last year's favourite boast, will be quieter this earnings season. Although households are still spending excess savings built up during the pandemic, they are increasingly fishing for bargains. American consumers skimped on everything from restaurants to electronics in December, causing retail sales to decline ▸▸

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by 1.1% on a seasonally adjusted basis, compared with the previous month. Constellation Brands, which makes and distributes Corona beer for drinkers in America, said on January 5th that it plans slower price increases this year. Many retailers are discounting goods to clear inventories. The prices of Tesla's electric cars are lower globally by as much as 20%.

As demand falters, firms are owning up to excessive costs—their second confession. Technology companies, which saw demand for their products slow last year from pandemic-induced highs, are doing so with special zeal. Apple's boss, Tim Cook, is taking a 40% pay cut this year. Twitter is auctioning off its neon-bird wall art. Less symbolically, on January 18th Microsoft announced that it would lay off 10,000 people. Two days later Alphabet, Google's corporate parent, said it would sack 12,000. These cuts do not entirely reverse big tech's pandemic hiring binge, but a prominent Silicon Valley venture capitalist thinks it will provide "air cover" for more tech firms to trim their payrolls and shore up their cashflows.

Companies' third confession concerns the fate of any profits that will be made. This earnings season is also a time for firms to lay out their spending plans for the year ahead. In aggregate, large American businesses tend to split their outgoings evenly between shareholder payouts (through dividends and share buy-backs) and investments (research and development, capital expenditure, and mergers and acquisitions).

In the era of cheap money, before central banks started raising interest rates to quash inflation, the payouts were often financed with debt. Now that money is getting expensive, such borrowing is likely to subside. As for dealmaking, plenty of acquirers are still sorting out the mess created by transactions struck at peak prices during the pandemic merger boom. Write-downs acknowledging the fall in value for some of these are more likely than announcements of replenished war chests and a desire to strike more deals.

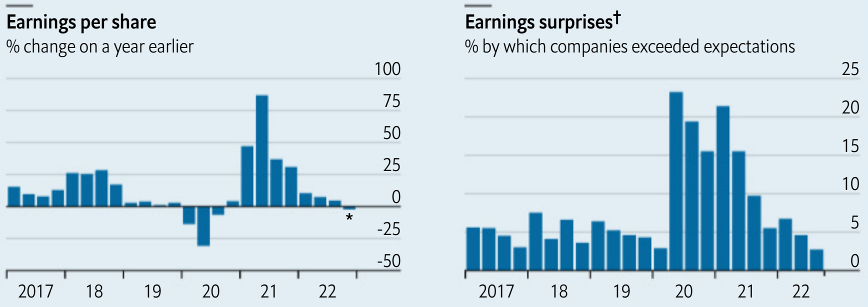
That leaves investments. The 21st century's mega-trends—decarbonisation, digitisation and decoupling between China and the West—argue in favour of mammoth spending on climate-friendly technology, on robots and software, and on non-Chinese factories. One European industrial boss contends that, as a result, capital spending should withstand the impending downturn better than usual.

Maybe. For the time being, though, most companies remain cautious. After American firms' capital expenditure ticked up in the third quarter of 2022, one tracker of corporate spending plans, compiled by Goldman Sachs, points to continued growth but at a considerably slower pace.

Many companies are likely to defer significant spending decisions until the economic uncertainty lifts. Ericsson, a Swedish maker of telecoms gear, warned that its American customers are increasingly holding off on new network investments. Dell shipped nearly 40% fewer PCs, which it sells chiefly to corporate customers, in the fourth quarter, compared with the year before, according to IDC, a research firm. Logitech, which makes keyboards, webcams and other desktop-related hardware, now expects revenues to fall by as much as 15% in the fiscal year to March, down from its previous estimate of no more than 8%. Makers of software, such as Microsoft, and chips, such as Intel, could also be affected by crimped digitisation budgets.

Like all earnings seasons, this one will spring positive surprises. A few have already sprung. United Airlines increased its prices without putting off passengers. Netflix smashed expectations by adding 7.7m new subscribers in the fourth quarter, partly thanks to a new, cheaper, ad-interrupted service. The beleaguered streaming service, which has lost roughly half its market value since its peak in autumn 2021, has issued bullish earnings forecasts for 2023. On January 25th Tesla reported a record quarterly profit.

Such perkiness will, however, be the exception rather than the rule this year. In aggregate, positive earnings surprises have been getting less positive in recent quarters. Having reached an all-time high as a percentage of GDP last year, post-tax corporate profits look overdue for a correction. And they may have further to fall. High debt and low taxes, which propelled corporate profitability for several decades, are no longer the tailwinds they were, as interest rates rise and the appetite for deficit-funded tax cuts diminishes. As this new reality sinks in, CEOs' half-full glasses may suddenly look half-empty. ■


A chill below zero

S&P 500

Earnings per share

% change on a year earlier

Earnings surprises†

% by which companies exceeded expectations

Source: Credit Suisse

*Estimate †Exceeding or missing estimates by 1% or more

Indian business

Picking on winners

MUMBAI

A short-seller's critique of the Adani empire

Not a day goes by in India without news of the exploits of its wealthiest tycoon, Gautam Adani. In September his fortune was estimated at $140bn, double what it was the year before, largely thanks to the huge gains of the seven publicly listed companies he controls. That encouraged new acquisitions, including an Israeli port, an Indian TV-news network and the country's second-largest cement producer.

The latest Adani news was less euphoric. On January 24th Hindenburg Research, an American short-seller, which makes money when its targets' share prices tank, released a report titled, "Adani Group: How the World's Third-Richest Man is Pulling the Largest Con in Corporate history". It alleges that share prices of Adani companies have been artificially inflated. The Adani Group's chief financial officer, Jugeshinder Singh, called the report a "malicious combination of selective misinformation and stale, baseless and discredited allegations" intended to undermine an upcoming secondary share offering of the group's flagship firm, Adani Enterprises. He also said that Hindenburg had published its report "without making any attempt to contact us or verify the factual matrix".

Hindenburg made its name by sniffing out problems in sexy startups. They included Nikola, an electric-lorry firm whose founder was later convicted of fraud, and Lordstown Motors, a carmaker that had overstated orders. In going after Adani, ▸▸

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Hindenburg has picked a fight with a corporate Goliath with a record of fast growth and of infrastructure investments that are pharaonic in their ambition. The short-seller notes that shares of Adani Enterprises, which describes itself as "an incubator focusing on establishing diverse new businesses", trade at 500 times earnings. Adani Green Energy, a renewables firm, boasts a price-to-earnings ratio of over 800. By comparison, at the peak of the pandemic technology boom in late 2021, the ratio for America's tech-heavy NASDAQ index was less than 30. On the basis of valuation alone, Hindenburg argues, the prices of the Adani businesses could drop by 85%.

And lofty valuations aren't the end of the story, the short-seller claims. It describes a complex edifice: seven Indian-listed companies sitting atop 578 subsidiaries. In 2022, it alleges, these engaged in 6,025 related-party transactions. This is the visible bit of an even more complex system, with multiple companies, many in foreign jurisdictions, which Hindenburg argues "have no obvious signs of operations". The point, the report claims, is to manipulate the listed firms' share prices and to shift money onto their balance-sheets "to maintain the appearance of financial health and solvency" amid high debt and thin liquid assets. Such allegations, Mr Singh said, have been "tested and rejected by India's highest courts".

Despite this forceful denial, investors were nervy. The combined market value of listed Adani firms fell by $11bn, or 5%. Some investors have harboured worries about the group's structure, acquisitiveness and debt. The fact that the fall wasn't steeper attests to its uncanny ability to weather storms. ■

Bartleby The curse of the headshot

What explains the corporate custom of strange poses and pained smiles?

Do an image search for the word "business" or "manager", and what comes back? Nothing that remotely resembles business or managers. It isn't just that the people are attractive. It is what they are doing. Many stock photos feature well-dressed types sitting around a table. One of them is holding forth and everyone else is laughing madly, like cult members hearing that the Rapture has been brought forward a week.

In other pictures, a speaker is pointing at a pie chart. Her colleagues look astonished at what they are seeing. Or people are shaking hands, purposefully and often. If they are ever left to their own devices, they stand in front of floor-to-ceiling windows and gaze moodily at the skyline. What could they be thinking? Is it about what was on that pie chart?

Some amount of business life involves sitting around a table. Occasionally there is laughter. But if you wanted to represent the reality of a meeting, one person would be talking, two people would be listening and everyone else would be wearing the glazed expression of clerics who have just lost their faith. If there was an accurate stock photo of someone working at a desk, its surface would be covered in crumbs and the laptop screen would be showing its owner's social-media account.

The corporate headshot is the way that firms use photography to bend reality. But whereas stock photos tend to glamorise business, headshots achieve the reverse. They make corporate life seem less fun than it actually is.

Most companies' websites contain a gallery of their senior executives and boards, the product of hours of awkward primping and posing. Executives are caked in make-up and asked to look into the camera with a succession of forced smiles. The results are consistently appalling. Most end up looking like well-dressed hostages. Someone, usually the general counsel, looks so pained that he or she appears to have just been Tasered. One or two eschew smiles altogether: in this context they are the hostage-takers.

The awkwardness is amplified if the photographer has decided to show more than a person's head and shoulders. Pity the executives who have been forced to stand side on to the camera, tilt their heads slightly like a giant parrot, fold their arms and told to look natural. If you ever saw someone standing like this in real life, you would think "better cross to the other side", not "I bet that person is great at creating shareholder value."

What on earth is going on? There is some research to suggest that profile photos can have a useful effect in commercial settings. Humans are quick to form judgments about others by looking at their faces: baby-faced people are regarded as more trustworthy than those who look older, for example, whereas more mature faces convey expertise. A recent paper from Stuart Barnes of King's College London and Samuel Kirshner of the University of New South Wales looked at the impact of facial characteristics on the prices that Airbnb hosts can charge their guests. They found that hosts with attractive and trustworthy faces could charge up to 5% more per night than their peers for similar apartments. Unsurprisingly, perceived trustworthiness mattered more for small, shared accommodation.

But the decisions made by consumers on online marketplaces do not explain corporate headshots. Maybe some people try to choose between Disney+ and Netflix by going to the About Us section of their websites, but it seems unlikely. And even if executive profiles were somehow feeding into the subconscious decisions of investors and job applicants, it is not at all clear what type of photograph should follow. Managers will already be trying to convey an impossible brew of leadership qualities, from breezy confidence to naked vulnerability. Now they have to look baby-faced too? No wonder people end up gurning.

So what does lie behind this strangely pervasive custom? A headshot is something for a new executive to show their mother, and for a weary one to show recruiters. It is useful for employees who have no idea what their ultimate boss looks like. Leadership galleries increasingly serve as a crude but quick measure of diversity. Perhaps the most plausible explanation is that it is just something that everyone else does. It is odd to have a leadership team that does not show their faces. Odd but not impossible. Alphabet lists its board members' names and eschews photos altogether. You just have to imagine them, shaking their heads in amazement at a graph.

Amazon

Can it deliver again?

SEATTLE

The pioneering e-commerce giant battles soaring costs and a stagnating legacy business

It is hard not to be in awe of Amazon. It is one of history's greatest companies. Jeff Bezos nurtured the firm from the humble online bookshop he founded in 1994 into a tech juggernaut, selling everything from corn syrup to cloud computing, a future trillion-dollar industry that Amazon more or less invented (see chart 1). Today it is the world's fifth-most-valuable company, third-largest revenue generator and second-biggest private employer. Its warehouses, data centres, shops and offices cover an area almost the size of Manhattan. Consumers, competitors and politicians have been left to wonder if Amazon would take over the world. Or whether it would stop there—it is investing heavily in Kuiper, a satellite-broadband venture.

All the superlatives notwithstanding, it is equally hard not to recognise that Amazon finds itself in something of a funk. With a downturn on the cards in America, its biggest market, shoppers are tightening their purse strings and corporate IT departments are paring back cloud spending. Amazon's market value is down by around $1trn since its peak in mid-2021, erasing all the gains of the covid-19 pandemic, when customers rushed to join its Prime subscription service and businesses were shifting their data to its cloud division, Amazon Web Services (AWS). This month Amazon announced 18,000 white-collar lay-offs, amounting to 6% of its corporate workforce. When it reports fourth-quarter earnings on February 2nd its annual revenue growth may for the first time ever come in at single digits, down from 22% in 2021. In October the company warned it might make little or no profit in the last three months of 2022.

Amazon's Icarus moment is not unique in big tech. All its fellow tech high-fliers have been hit as demand for their digital wares declines now that people are no longer locked down at home and postmen no longer bring pandemic-stimulus cheques from the government. But under Andy Jassy, the AWS chief who took over as CEO after Mr Bezos retired in July 2021, Amazon has expanded much more aggressively than Alphabet, Apple, Meta and Microsoft (see chart 2 on next page). This exuberance leaves the company in a tough spot as it contends with three big challenges: a sputtering retail business; decelerating cash engines of AWS and a newish advertising business; and growing competition. Can the understated Mr Jassy overcome them, and turn Amazon's sprawling empire into a dependably profitable business?

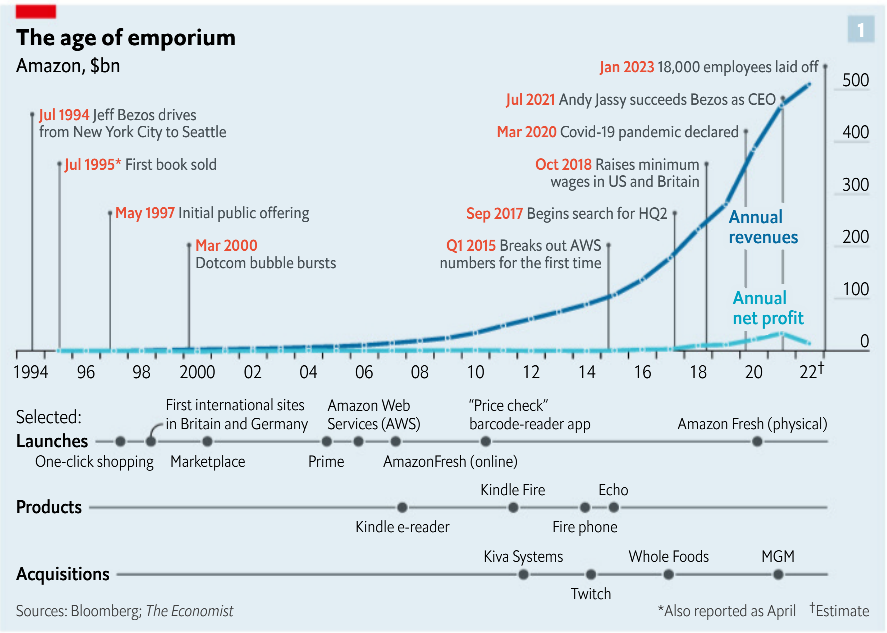
To understand how Amazon found itself in its current predicament, go back to just before the pandemic. The firm was already planning a big expansion of its warehouse and logistics network. The aim was to offer one-day delivery for more products to more Prime members. When national lockdowns created a boom in online shopping, Amazon doubled down. In April 2020 Mr Bezos told investors: "If you're a shareowner in Amazon, you may want to take a seat, because we're not thinking small."

Over the next two years Amazon doubled the size of its fulfilment network. Mark Mahaney of Evercore ISI, an advisory firm, calculates that Amazon added about 130m square feet (12m square metres, or nearly four Central Parks) to its global footprint in both 2020 and 2021. In those years Amazon's cumulative capital spending reached $100bn. No company anywhere in the world invested more in that period. Last year it may have invested another $60bn, again more than anyone else. Around half that sum went on warehouses and vehicles; most of the rest on AWS data centres. Amazon also increased its payroll to 1.6m, from 800,000 in 2019.

In the first quarter of 2022 Amazon admitted that overhiring and overbuilding were each adding $2bn to its quarterly costs, relative to 2021. Pricier fuel and higher wages meant a further $2bn a quarter. In April 2022 workers at a warehouse on Staten Island voted to unionise, and called for "more reasonable" productivity targets and more pay. If Amazon agrees to the union's demands, the Staten Island warehouse alone could add $200m or so to annual operating costs, estimates Morgan Stanley, a bank. At the same time, retail sales slowed; in December American consumers spent 1.1% less than the month before. Amazon's retail losses are thus piling up. Mike Morton of SVB MoffettNathanson, a research firm, estimates that when you strip out profits from ads, annual operating losses from the retail division (plus devices, entertainment and other smaller units) amount to about $30bn.

The ad operation itself is another point of concern. In the past few years it has gone from virtually non-existent to the world's fourth-biggest, with yearly revenues of $36bn. Its operating margins are reckoned to be around 30%, on a par with the industry's two giants, Alphabet and Meta. But profitability may be slipping. Amazon has reportedly splurged around $1bn for the rights to stream some American-football matches, and alongside them some ads—a fortune compared with the cost of posting banners on its own website. At the same time, year-on-year growth in ad sales has slowed sharply, to 25% in the third quarter of 2022, from 53% the year before.

Amazon's main cash engine, AWS, is also decelerating as business customers trim their digital budgets. Soaring energy prices, especially in Europe, made it much costlier to keep the power-hungry data centres whirring. What is more, AWS is particularly vulnerable to shrivelling orders ▸▸

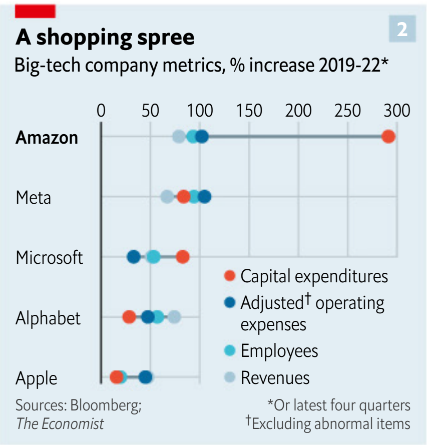

The age of emporium
Amazon, $bn

Sources: Bloomberg; *The Economist*
*Also reported as April †Estimate

from startups, which tend to favour it over rivals such as Microsoft Azure. As their venture-capitalist backers grow stingier amid the tech rout, the young tech firms are slashing their cloud spending. In October Brian Olsavsky, Amazon's chief financial officer, admitted that AWS's annual sales growth had declined to around 25%, the slowest on record. The average remaining lifetime of AWS contracts also ticked down in the most recent quarter, suggesting that customers are signing fewer deals or shorter ones. Microsoft, the second-biggest cloud provider, said on January 24th that it expects sales growth at its cloud unit to decelerate by four or five percentage points this quarter (see Schumpeter).

Another problem is stiffening competition. As covid pushed shoppers online, traditional retailers switched their focus to e-commerce. Walmart increased its last-mile-delivery capacity four-fold just since the start of 2022. Target, another legacy supermarket chain, has used its acquisition in 2017 of Shipt, an online-shopping platform, to spruce up its digital-sales channels. Between 2018 and 2021 six big conventional retailers, including Walmart and Target, increased their collective share of American e-commerce spending from 8% to 12%, according to SVB Moffett-Nathanson. In the same period Shopify, a Canadian firm which offers merchants tools to sell online, expanded its market share in America from 5% to 10%. It is investing heavily in its own fulfilment service, which it launched in 2019.

Rivals are making their presence felt in Amazon's non-retail businesses, too. AWS's healthy first-mover lead in the cloud is being eaten away. Numbers from Synergy Research Group, a data provider, show that its global market share in the business has more or less stabilised at just over 30% in the past three years. Its two main domestic rivals, Microsoft and Alphabet, have more or less drawn level with it when taken together. In advertising, Apple has a small but growing operation and Microsoft is dipping its toe in the water, signing a deal last year to provide adverts for Netflix's new ad-supported streaming service.


A shopping spree

2

Big-tech company metrics, % increase 2019-22*

Sources: Bloomberg; *The Economist*

*Or latest four quarters

†Excluding abnormal items

The combination of loss-making retail, slowing profit motors and growing competition is hammering Amazon's profitability. The firm's overall operating margin in the third quarter of 2022 was just 2%, the lowest since 2017. In the past four quarters Amazon lost $26bn in free cashflow (the money companies generate after deducting capital investments).

Little of this can be laid directly at Mr Jassy's door. Mr Bezos's departure stripped the new boss of some battle-hardened lieutenants. Dave Clark, who ran the retail arm and was seen as another possible successor, left to run Flexport, a supply-chain consultancy. Charlie Bell, a talented AWS executive, jumped ship to Microsoft. Other Bezos-era stalwarts, including Jay Carney, head of public relations and policy, and Jeff Blackburn, head of media, are also moving on. Moreover, the startup-like culture of innovation Mr Bezos cultivated is hard to maintain at Amazon's staggering size, says one longtime executive.

As for the ambitious expansion plans, they were hatched under Mr Bezos, who remains executive chairman. The soft-spoken Mr Jassy, whom you would be forgiven for not noticing in a moderately crowded room, has said he consults his former boss about once a week. With the possible exception of concentrating the lay-offs in the Echo smart-speaker unit, in which Mr Bezos was deeply involved, it is hard to point to decisions the current CEO has made that Amazon's founder wouldn't have.

With Mr Bezos preoccupied with his rocketry firm, Blue Origin, and other plutocratic pursuits, Mr Jassy looks safe in his job for the time being. But he has his work cut out. The first task is to rein in spending and boost returns. It has been a while since Amazon dialled back its capital expenditure, which it does every now and again to show shareholders just how profitable it is, notes Mark Shmulik of Bernstein, a broker.

Now such moves may be in the offing. Last February the price of Prime membership in America rose for the first time, from $119 a year to $139. European Prime members have seen a similar increase. Fees that merchants on Amazon's marketplace pay for fulfilment grew by more than usual in 2022, and on top of that the company levied additional surcharges for inflation and the holiday shopping season. It is trying to sublet some 30m square feet of unneeded space and has begun offering long-term storage for vendors.

In an effort to contain costs, Mr Jassy is binning plenty of projects. Amazon has cancelled or delayed the construction of dozens of warehouses, and closed dozens of physical shops, including all Amazon Books and 4-star outlets, which sold items that received a rating of four stars or higher online. Amazon Glow, a video-calling device, and Astro 2.0, a home robot, were also killed off. The Echo lay-offs look like an attempt by Mr Jassy to downsize a unit that was reportedly losing around $5bn a year.

One thing Mr Jassy seems loth to do is hive off AWS into a separate company, as some investors have urged. A year ago Daniel Loeb, boss of Third Point, a hedge fund, reportedly told his clients that splitting the cloud business from the retail one could generate $1trn in shareholder value. Some big potential customers, such as Walmart, shun AWS because it is run by a retailing rival. A sale would also placate trustbusters, eager to break up what they perceive as unaccountable tech monopolies.

A spin-off would, however, also sever potentially lucrative links between the cloud and retail arms. For instance, AWS has new artificial-intelligence (AI) tools for advertisers to target shoppers on Amazon's e-commerce site. The line between the two businesses is blurring, says Adam Epstein, co-president of Perpetua, an ad startup. The retail unit, for its part, has spawned several AWS offerings, such as a supply-chain tool first trialled in Amazon's grocery business. Mr Shmulik thinks AWS may start selling the clever live-streaming technology it developed to broadcast Thursday Night Football on Prime Video.

Indeed, the future may involve weaving AWS more tightly into other parts of the empire. In time that could turn Amazon from primarily a seller of goods to consumers into a seller of increasingly AI-assisted services to both individuals and businesses. Before the pandemic, the share of Amazon's sales coming from its main business-facing segments was 31% and high-margin services made up 37% of revenue. Today the figures are 46% and 53%, respectively. The company's multibillion-dollar bets on Kuiper, the satellite network, and Zoox, a self-driving-car venture, hint that those shares may rise further. So do investments in health care. Last year Amazon bought One Medical, a provider of primary care, and launched Amazon Clinic, which offers virtual consultations for more than 20 ailments. On January 24th it unveiled a drug-subscription service for Prime members.

If Mr Jassy can balance capital discipline with a few focused wagers, Amazon could return to greatness. That would be a less inspiring business tale than Mr Bezos's pursuit of world domination. But it needn't be less lucrative. ■

Technology

Gadfly season

Languishing Silicon Valley stocks attract Wall Street's mischief-makers

For bosses and boards, dealing with the odd activist shareholder is par for the course. Contending with a swarm of such gadflies is unusual. Last October Starboard Value, an activist hedge fund, took a "significant" stake in Salesforce, a maker of customer-management software, arguing that the firm had failed to convert its leading market position into juicy margins and needed to cut costs. On January 4th Salesforce duly announced it would lay off 8,000 staff, or 10% of its workforce. That was not enough to swat off the attacks. On January 22nd it emerged that Elliott Management, a fearsome member of the gadfly genus, had also taken a multibillion-dollar stake in the company. The next day another, Inclusive Capital, was reported to have been buying Salesforce shares.

So far the hedge funds have said little publicly about their demands. Deeper cost-cutting is almost certainly among them. Salesforce's sales and marketing costs chew up 42% of its revenues, compared with 28% and 19% for SAP and Oracle, two big rivals, respectively (see chart 1). The activists could also push for a spin-off of one of Salesforce's pricey recent acquisitions, such as MuleSoft, a business-software firm, Tableau, a data-visualisation tool, or Slack, a workplace-messaging app.

Salesforce is not the only tech firm suffering such vexation. Last July Elliott was revealed to hold around 9% of Pinterest, a digital pinboard; by December it had wriggled its way onto the board. In October Altimeter, an activist fund with a holding in Meta, called on the social-media empire to reduce headcount and scale back its metaverse investments. In November TCI, another such outfit, demanded that Alphabet lay off staff, lower highish salaries and cut back on bets unrelated to its core search business, such as autonomous driving.

All this buzz comes after a quiet few years. Between 2018 and 2021 the number of activist campaigns fell steadily worldwide. In 2022, as stockmarkets plunged, activists sprang back to life, launching 36% more attacks than the year before, according to Lazard, an investment bank.

Silicon Valley, which went on an uncontrolled expansion binge amid the pandemic tech boom, presents a particularly juicy target. As Altimeter noted in a public letter to Meta, "It is a poorly kept secret in Silicon Valley that companies ranging from Google to Meta to Twitter to Uber could achieve similar levels of revenue with far fewer people." Investors have also soured on tech stocks, whose promise of profits in the distant future look less attractive today as interest rates rise. The tech-heavy NASDAQ index has fallen by 30% since its highs in late 2021, twice as much as the S&P 500 index of big American firms. That has allowed activists to swoop in at discounted prices, notes Gregory Rice of BCG, a consultancy. In 2022, 21% of activist campaigns globally took aim at tech, up from 14% in 2018-21 (see chart 2). In America, last year's figure was 27%.

Dual-class share structures like those of Meta and Alphabet, which let founders keep majority voting rights, offer the targets some protection. Still, even founder-controlled firms have to keep shareholders happy. Meta's share price took a drubbing after it rebuffed Altimeter's call to ease off its metaverse plans. Two weeks later the company announced it would fire 11,000 staff, or 13% of its workforce, and trim up to $2bn, or some 5%, from its capital spending in 2023. On January 20th Alphabet, too, said it would sack 6% of its employees.

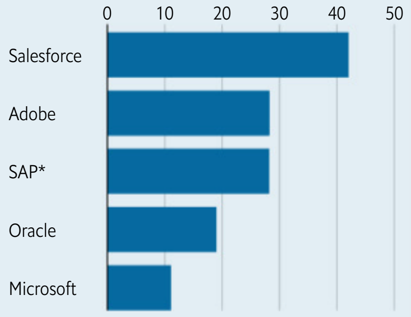
Contrary to their reputation for short-term opportunism, activist investors can help boost long-term returns. One study of 2,000 activist campaigns concluded that target firms on average outperformed their rivals after five years on both share-price and operating measures. Microsoft and Apple, tech's two giants, have both had constructive exchanges with activists in the past. In 2013 Apple was nudged by Carl Icahn, a veteran gadfly, into returning some of its mounting cash pile to shareholders. Microsoft's revival in the past decade was helped along by the appointment of another activist, Mason Morfit, to the board at the start of Satya Nadella's tenure as CEO in 2014.

Whether or not other tech giants follow Apple's and Microsoft's conciliatory example, they may be realising that the activists aren't going away. After Alphabet announced its lay-offs, TCI sent it another letter arguing they were too modest. ■

1

Cutting some Slack

Sales and marketing costs as % of revenues, 2022



Source: Bloomberg

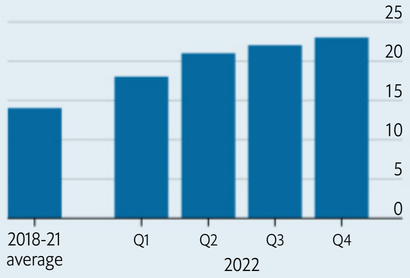
*Estimate

2

Silicon Valley v Wall Street

Worldwide activist-shareholder campaigns*

In technology sector as % of total



Source: Lazard

*Targeting companies with market capitalisation over $500m

Schumpeter | Lightning in a chatbottle

Satya Nadella has dreamed of this Microsoft moment for his whole career

Many who have met Satya Nadella like him. For those who haven't, a skim through his autobiography endorses the view that the boss of Microsoft is an intelligent, decent sort of person. He is unassuming, with a passion for cricket. He is a listener, who encourages employees to share their personal as well as professional dreams. He writes about Buddhism, but not in a new-agey way. His son was born with cerebral palsy, so Mr Nadella seeks to understand suffering. At times, there is something gleefully Tigger-like about him, when he can barely contain his excitement about Microsoft's new technologies. He describes one such "eureka moment" the first time he put on one of the firm's HoloLens mixed-reality headsets and, thanks to a live feed from NASA's Mars rover, visualised himself walking on the red planet. It was, he wrote, a glimpse into the future. "The experience was so inspiring, so moving, that one member of my leadership team cried."

Once again Mr Nadella is giddy with "this-is-the-future" euphoria. On January 23rd Microsoft announced its third investment, estimated at $10bn, in OpenAI, the company behind ChatGPT. The advanced artificial-intelligence (AI) tool lets users ask questions and get human-like, often funny responses. In the past few months it has grabbed headlines and become part of the zeitgeist. In no time, the wizardry of the technology, however error-prone, has led to its portrayal as a potential Kodak moment for Alphabet-owned Google, a boon to cancer research, the end of coding as you know it, and a nail in the coffin of the exam essay. In other words, it's the tech hype cycle on steroids.

At the risk of sounding churlish, it is worth noting that seven years after Mr Nadella's HoloLens epiphany, the whole mixed-reality buzz at Microsoft has gone deathly quiet. HoloLens was reportedly affected by the firm's 10,000 recent lay-offs. That said, ChatGPT is already so accessible and intuitive to use that it is hard to imagine it will be a flash in the pan. It is not difficult to see how Microsoft, with its strength in cloud computing and business software, could use OpenAI's underlying GPT models to rejuvenate a whole range of products. And Mr Nadella, for all his mindfulness, burns with an ambition to restore the company to the pinnacle of tech innovation that it vacated with the onset of social media and the smartphone. Could this be his moment?

Microsoft's share price suggests not. It has barely advanced since November 29th, the day before OpenAI publicly launched ChatGPT (save for a brief rally after Microsoft reported its quarterly earnings on January 24th that were a bit better than expected). Given the risk of an economic slowdown, which is cooling demand for Microsoft's software and cloud services, investors have too many short-term concerns to pay much heed to Mr Nadella's promises of AI-flavoured jam tomorrow.

Yet they shouldn't underestimate his missionary zeal. He led Bing, Microsoft's search engine, when Google was on a tear. He led its cloud provider, now called Azure, when it was an also-ran to Amazon Web Services, owned by the e-commerce giant. He has long nurtured a passion to leapfrog his west-coast rivals. That makes him impatient with AI research for its own sake. He wants it embedded in products that wow customers. Hence Bing, with a mere 7% of search queries in America, will shortly incorporate ChatGPT to wrestle share away from Google. GitHub, Microsoft's coding tool, is using OpenAI technology in its Co-pilot product, aimed at accelerating the work rate of software developers. Microsoft is likely to overhaul products like Office and Windows with GPT technology, so that chatbots can take the drudge out of creating PowerPoints and Excel spreadsheets. As for the cloud, Microsoft benefits because OpenAI has built and trained its GPT models on Azure, and it can offer state-of-the-art chatbot services to Azure's customers. The more they are used, the better they get.

Microsoft will not have the field to itself, nor will it be a winner-takes-all market. Among other cloud providers, Alphabet, for one, has foundational models that are more powerful than GPT. For now, though, its ability to compete is constrained. Alphabet, loathed by critics of surveillance capitalism, bears a big reputational risk if human-like AI amplifies the biases and privacy concerns of current consumer technology. It is under regulatory fire: a lawsuit filed on January 24th by America's Department of Justice and eight states calls for the break-up of Google's ad-tech business. Moreover, the cost of the average Google search is exceedingly cheap; adding ChatGPT-like searches, heavy on computing power, would raise it. As for Microsoft's business-software competitors, such as the beleaguered Salesforce, they are trying to cut costs and cannot hope to match Microsoft's advanced-AI investments, says Mark Moerdler of Bernstein, a broker.

First innings

In short, Microsoft has a valuable head start and Mr Nadella is loth to squander it. The big question, however, is not who will win. In these early days that would be like asking, at the dawn of the 19th century, who will come out top from the Industrial Revolution. It is more a matter of how well-equipped is any company to handle the potential implications of introducing technology that will do work previously done by humans, but with neither the ability nor the moral compass to check the reliability of its work. The risks of propagating errors or, worse, misinformation, are serious. So is the danger of societal backlash if knowledge workers feel their jobs are threatened—though if the technology succeeds, over the long term it is likely to be a boon to job creation.

Microsoft's initial approach to the potential pitfalls is shrewd. Investing in OpenAI puts ChatGPT at arm's length if something goes wrong. But eventually, with GPT infused in all of its products, it will bear a big responsibility for the outcome. In that case, the attention will focus on Microsoft's own moral compass—and Mr Nadella's human decency will be put to the test. ■

Finance & economics

The global economy

Dare to dream

Markets are giddy. Could the world really avoid a recession?

Last year markets had a terrible time. So far 2023 looks different. Many indices, including the Euro Stoxx 600, Hong Kong's Hang Seng and a broad measure of emerging-market share prices, have seen their best start to the year in decades. America's S&P 500 is up by 5%. Since reaching its peak in October, the trade-weighted value of the dollar has fallen by 7%, a sign that fear about the global economy is ebbing. Even bitcoin has had a good year. Not long ago it felt as though a global recession was nailed on. Now optimism is re-emerging.

"Hello lower gas prices, bye-bye recession," cheered analysts at JPMorgan Chase, a bank, on January 18th, in a report on the euro zone. Nomura, a Japanese lender, has revised its forecast of Britain's recession "to something less pernicious [than] what we originally expected". Citigroup, another bank, said that "the probability of a full-blown global recession, in which growth in many countries turns down in tandem, is now roughly 30%, [in contrast with] the 50% assessment that we maintained through the second half of last year." These are crumbs: the world economy is weaker than at any point since the lockdowns of 2020. But investors will eat anything.

Forecasters are in part responding to real-time economic data. Despite talk of a global recession since at least last February, when Russia invaded Ukraine, these have held up better than expected. Consider a weekly estimate of GDP from the OECD, a group of mostly rich countries which account for about 60% of global output. It is hardly booming, but in mid-January few countries were struggling (see chart 1 on next page). Widely watched "purchasing-manager index" measures of global output rose slightly in January, consistent with GDP growth of about 2%.

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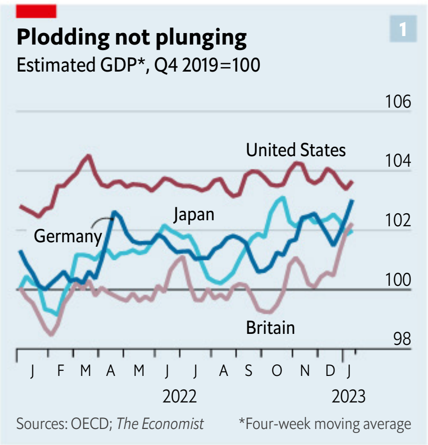
Official numbers remain mixed. Recent figures on American retail and industry came in below expectations. In Japan machinery orders were far weaker than forecast. Yet after reaching an all-time low in the summer, consumer confidence across the OECD has risen. Shortly after we went to press, officials were due to publish their first estimate of America's GDP in the fourth quarter of 2022. Most economists were expecting a decent number, though pandemic disruptions mean these figures will be less reliable than normal.

Labour markets seem to be holding up, too. In some rich countries, including Austria and Denmark, joblessness is rising—a telltale sign that a recession is looming. Barely a day goes by without an announcement from another big technology company that it is letting people go. Yet tech accounts for a small share of overall jobs, and in most countries unemployment remains low. Happily, in places where demand for labour is dropping, employers are withdrawing job adverts, rather than sacking people. We estimate that, since reaching an all-time high of more than 30m early last year, unfilled vacancies across the OECD have fallen by about 10%. Meanwhile, the number of people actually in a job has fallen by less than 1% from its peak.

Investors pay attention to labour markets, but they really care about right now is

Plodding not plunging

Estimated GDP*, Q4 2019=100



Sources: OECD; *The Economist* *Four-week moving average

inflation. It is too soon to know if this threat has passed. In the rich world "core" inflation, a measure of underlying pressure, is still 5-6% year on year, far higher than central banks find comfortable. The problem, though, is no longer getting worse. In America core inflation is coming down, as is the share of small firms which plan to raise prices. Another measure, from researchers at the Federal Reserve Bank of Cleveland, Morning Consult, a data firm, and Raphael Schoenle of Brandeis University, is a cross-country gauge of public inflation expectations. It also seems to be dropping (see chart 2).

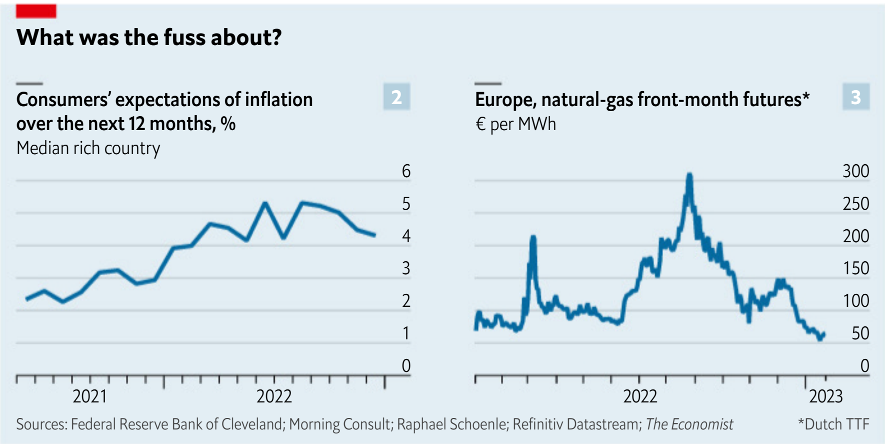
Two factors explain why the global economy has held up better than expected: energy prices and private-sector finances. Last year the cost of fuel in the rich world rose by well over 20%—and by 60% or more in parts of Europe. Economists expected prices to remain high in 2023, crushing energy-intensive sectors such as heavy industry. They were wrong. Helped by unseasonably warm weather, companies have proved unexpectedly flexible when it comes to dealing with high costs. In November German industrial gas consumption was 27% lower than normal, yet industrial production was only 0.5% down on the year before. And over the Christmas period European natural-gas prices fell by half to levels last seen before Russia invaded Ukraine (see chart 3).

The strength of private-sector finances has also made a difference. Our best guess is that families in the G7 are sitting on "excess" savings—ie, those above and beyond what you would expect them to have accumulated in normal times—of around $3trn (or about 10% of annual consumer spending), accumulated through a combination of pandemic stimulus and lower outlays in 2020-21. As a result, although companies' quarterly earnings in America suggest spending is faltering, it is not falling off a cliff. Consumers can weather higher prices and a higher cost of credit. Businesses, meanwhile, are still sitting on large cash piles. And few face large debt repayments right now: $600bn of dollar-denominated corporate debt will mature this year, compared with $900bn due in 2025.

Can the data continue to beat expectations? There is evidence, including in a recent paper by Goldman Sachs, a bank, that the heaviest drag from tighter monetary policy occurs after about nine months. Financial conditions started really tightening nine months ago. If the theory holds, then the economy soon might be on surer footing, even as higher rates eat away at inflation. China is another reason for cheer. Although removing domestic covid-19 restrictions slowed the economy in December, as people hid from the virus, scrapping "zero-covid" will ultimately raise global demand for goods and services.

The pessimistic case, however, remains strong. Central banks have a long way to go before they can be certain that inflation is under control, especially with China's reopening pushing up commodity prices. America's forward-looking indicators are getting bleaker. In addition, an economy on the cusp of recession is unpredictable. Once people start to lose jobs, and cut spending, predicting the depths of a downturn becomes hard. And a crucial lesson from recent years is that if something can go wrong, it often does. But it is nice to have a glimmer of hope all the same. ■

What was the fuss about?



Consumers' expectations of inflation over the next 12 months, %
Median rich country

Europe, natural-gas front-month futures*
€ per MWh

Sources: Federal Reserve Bank of Cleveland; Morning Consult; Raphael Schoenle; Refinitiv Datastream; *The Economist* *Dutch TTF

Currency unions

Gaucho, grilled

Latin America's early contender for worst economic idea of the year

ARGENTINA IS RUNNING out of vaults. With annual inflation nearing 100%, as the central bank prints bills to cover the government's fiscal deficit, local banks are making space for ballooning stocks of pesos. Officials have tightened capital controls. Imports are at a standstill. The government is going through the motions with the IMF to avoid its tenth sovereign default since independence in 1816. Yet on January 22nd Luiz Inácio Lula da Silva, Brazil's president, and Alberto Fernández, his Argentine counterpart, announced they would start preparations for a common currency, possibly leading to a full currency union, which would hitch South America's biggest economy to one of its sickest.

The idea has a history. First came the "gaucho", a currency meant to replace Brazil's cruzado and Argentina's austral until the concept was abandoned amid economic turmoil in 1988. On its heels was a proposal by members of Mercosur, a trade alliance, to adopt a common currency, and SUCRE, an experiment led by Venezuela, which had ambitions to reduce the continent's reliance on the dollar. Since it is prone to selling foreign reserves to prop up the peso, Argentina is always short of dollars to settle loans and pay for imports. A joint currency would create alternative reserves and make neighbourly trade easier. Brazil is Argentina's largest trading partner. By supporting the idea Lula, as Mr Silva is known, gets a reputational boost from being seen to revive regional co-operation.

That, at least, is the case for the idea. The case against is daunting. A full union, with a joint central bank, would surely crumble. Economists judge how well countries fit in a currency union using criteria devised by Robert Mundell, a Canadian economist, that measure economic similarities. Normally, central bankers tailor interest rates to individual economies; in a union, one rate has to do for them all. Policy rates in Argentina and Brazil are an astonishing 61 percentage points apart. Their business cycles are wildly out of sync as their main exports—agriculture and industrial commodities, respectively—are affected by different global headwinds. Argentina's problems make its downturns deeper and booms shorter and shallower.

Another condition specified by Mundell is that people and money should move smoothly across borders, acting as a means of adjustment when a shock hits one country but not the other. Whereas in Europe farm workers hop between jobs and countries, South America's poor infrastructure makes travel a hassle, and Argentina's capital controls make getting paid across borders nearly impossible. If workers do not end up where they are most productive, artificially high wages could spark inflation in parts of the union. Moreover, as long as Brazil was committed to the joint currency, it would be forced to bail out its southern neighbour. Secure in that knowledge, Argentina would have every reason to carry on spending irresponsibly.

Brazil is already getting cold feet. Officials have stressed the new currency would be an addition to the two national ones, rather than a replacement, and that it is a long-term project. Other countries are not racing to join. Lula and Mr Fernández offered South American leaders the chance to do so at a press conference on January 25th: no one has so far taken them up.

This watered-down union would still place Argentina's problems at Brazil's door. There would need to be a monetary policymaker, either a currency board or full-blown central bank, to watch exchange rates. The IMF, to which Argentina owes $72bn, would be less willing to prop up the peso if Argentina had another legal tender. To top it all off, Lula would have to ignore his independent central bank, which has come out in opposition to the idea. On January 23rd, barely 24 hours after the grand announcement, Fernando Haddad, Brazil's finance minister, implied the idea would only get off the ground as notes of credit that were backed by Argentinian commodities. That would not be currency at all. But it would be more borrowing, which is exactly what Argentina set out to avoid. ■

Buttonwood When the fees are worth it

Just occasionally, professional stockpickers can beat their algorithmic opponents

LAST YEAR'S plunging markets left few investors smiling. Stocks and bonds fell in tandem; haven assets failed to offer safe harbour. Doing well meant making single-figure percentage losses rather than double. It might, therefore, seem an odd time for fund managers to be walking with a spring in their step.

But on January 23rd it emerged that Citadel, a secretive investment firm based in Miami, had generated $16bn in net profits for its clients in 2022, breaking the record for the largest annual gain in dollar terms. Its main hedge fund posted a 38% return—while MSCI's broadest index of global stocks declined by 18%. Champagne corks were popping elsewhere, too. Strategas Securities, a brokerage and research firm, reckons that 62% of active fund managers investing in large American firms beat the S&P 500 index of such shares in 2022, the highest percentage since 2005.

Last year therefore snapped a miserable losing streak for stockpickers. Every year from 2010 to 2021, more than half of active managers who benchmarked their performance against the S&P 500 failed to beat it. In other words, the average fund manager was outclassed by a simple algorithm blindly buying every stock in the index. Such algorithms—known as "passive" or "index" funds—are taking over. By 2021 they held 43% of the assets managed by American investment companies, and owned a greater share of the country's stockmarket than their actively managed counterparts.

The logic that drives passive funds is inescapable. By definition, the performance of an index is the average of those who own the underlying stocks. Beating an index is a zero-sum game. If one investor does, another must lose out. Active managers may spot a superstar stock that ends up leaving the rest in the dust. But it will also be in the index, so passive investors will buy it too. Meanwhile, active managers tend to charge fees that are orders of magnitude higher than passive ones: often 1-2% a year, and more for whizzy hedge funds, compared with as little as 0.03% for their algorithmic peers. This drag on performance makes it all but inevitable that index funds will outpace human money managers in the long run.

So how did fund managers outperform in 2022? One possibility is sheer luck. Pick a group of stocks from an index at random, subtract a percentage point or two from their returns for fees, and occasionally you will have chosen shares that do well enough to beat the average.

A variation on this allows for some skill on the stockpicker's part. At the start of 2022, Alphabet, Amazon, Apple, Microsoft and Tesla accounted for nearly a quarter of the total market capitalisation of the S&P 500. Their collective value dropped by 38% over the year; that of the rest of the index dropped by just 15%. So concentrated was the index that a single good judgment—thinking the shares of America's tech giants were frothy and to be avoided—would have left a stockpicker with a decent chance of beating the market.

Broadening out this tech queasiness to a more general worry about stock valuations would have given stockpickers a second chance to outperform. Quibbling about such things went out of fashion during the years of cheap money that followed the global financial crisis of 2007-09 and then covid-19. Share prices soared to eye-watering multiples of the underlying companies' earnings or assets, then kept climbing. Those who took that as a signal to shun them, in anticipation of a correction, lost out. Passive funds that indiscriminately bought everything, including stocks which seemed overpriced, prospered. But in 2022 rising interest rates brought the trend to an abrupt halt. Investors who had hunted for stocks that were cheap relative to their fundamentals were at last rewarded.

For firms like Citadel, a final chance to prove their worth came from plummeting share and bond prices. Market crashes and an uncertain economic backdrop are the raison d'être for hedge funds with a mandate to invest in any asset class they wish. Stockmarket indices that are falling by double digits are a lot easier to beat if you aren't obliged to buy stocks, as are the funds which track the market. And for the most nimble managers, last year's crises looked like opportunities. As a convulsing sovereign-debt market forced British pension funds into fire-sales in September, Apollo, a private-investment firm, started snapping up assets to book a quick profit. Index funds are not going away, and nor should they. But just occasionally, active managers are worth their fees.

Currencies

Flipped

HONG KONG

What inflation means for the Big Mac

For much of the past two years, economists have argued fiercely about prices. As inflation in America and elsewhere has exceeded central-bank targets, analysts have dissected different components of the cost of living, including the prices of goods, services, energy and rents.

But what about the Big Mac? The iconic McDonald's burger is an amalgam of rent, electricity and labour, as well as beef, bread and cheese. Its price is therefore indicative of broader inflationary pressures. And because the burger is basically the same wherever you are in the world, its price can also reveal how inflation has changed the relative costliness of different countries.

In America, for example, the median price of a Big Mac has risen by more than 6% to an average of $5.36 in the past two years. (The price tends to be a bit higher in big cities.) According to the theory of purchasing-power parity, when a country's prices rise, its currency should fall, everything else equal. This stops the country's prices moving too far out of line with those elsewhere in the world.

Yet the dollar has risen, not fallen, over the past two years against the currencies of most other big economies. A trade-weighted exchange-rate index published by America's Federal Reserve increased by more than 9% from December 2020 to December 2022. One reason for this is that inflation has also returned to lots of America's trading partners. Indeed, in many places it is worse. Big Mac prices have risen by 14% over the past two years in the euro area and by 15% in Britain. But the dollar's rise against the euro and pound has been more than required to offset this inflation gap.

The combination of rising prices and a rising currency threatens to move American prices out of whack with those elsewhere in the world. Two years ago, for example, the Big Mac was 26% cheaper in Japan than America. In principle, this suggests the yen was undervalued and should have risen against the dollar. In fact, the opposite occurred. A Big Mac is now more than 40% cheaper in Japan.

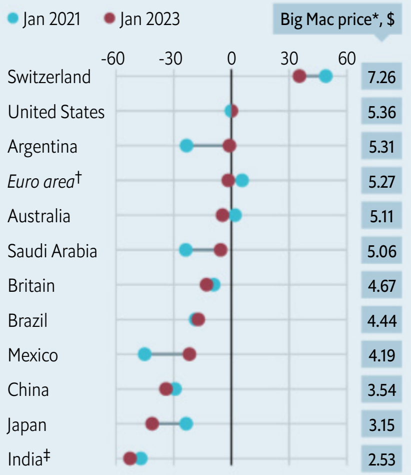
There are exceptions where the theory of purchasing-power parity has held. Although Argentina's peso has fallen against the dollar, prices in the country have risen even faster. A Big Mac now costs the equivalent of $5.31. That is high compared with the price two years ago and also compared with today's price in Brazil ($4.44). If the two Latin American countries were to form a currency union at today's exchange rate, Argentina would find itself at a hefty competitive disadvantage. It would be almost 20% more expensive than its larger neighbour, at least judging by burger prices.

The Economist has been making comparisons of this kind since 1986. Converting Big Mac prices into dollars always reveals big differences in the cost of the same burger in different countries. One measure of the "fair value" of a currency is the exchange rate that would eliminate these gaps. But, of course, exchange rates are not the only thing that can adjust. Prices can also rise faster in one country than another. In the long era of low inflation, this was not where the action was. Over the past two years, prices have been on the move in many countries. Unfortunately, these bouts of inflation have done little to move burger prices closer together. ■

The Big Mac index

Local currency valuation against the dollar, %

Selected countries



*At market exchange rates (Jan 24th 2023)
†Weighted average of member countries ‡Maharaja Mac
Sources: McDonald's; *The Economist*

Christian finance

God and mammon

Serving two masters is tricky, it turns out

Is it possible to manage money successfully and be a virtuous Christian? For 2,000-odd years, followers of the world's largest religion have debated the issue. Recently the debate has become fractious. The management of Christian money, once farmed out to professionals, is now a moral minefield, the negotiation of which has effects in the here-and-now, not just the hereafter.

Christian investors mostly fall into three camps: those willing to forge a partnership with environmental, social and governance (ESG) types; those stridently opposed to them; and Roman Catholics. Dave Zellner, who manages $24bn for Wespath, in effect the investment arm of America's Methodists, is in the first. He calls his job a search for "the intersection between good business practice and church values". Wespath lends to housing projects for the poor, but at market rates. It teams up with worldly lobby groups for shareholder activism, including a coalition called Climate Action 100+ which encourages energy companies to quit carbon.

Robert Netzly, an American evangelical, is Mr Zellner's mirror image. His firm, Inspire Investing, manages $2bn. It seeks to apply "Biblical principles" to all choices. Last year Mr Netzly renounced the ESG label, saying it was "weaponised by liberal activists to push forward their…social-Marxist agenda". But he agrees with ESG advocates that non-financial criteria should be used to consider investments—he just employs different criteria, such as whether firms support abortion by, say, funding travel for employees' procedures. He also engages in shareholder activism, pushing banks to accept business from religious conservatives. Properly mobilised, he says, the Christian investment industry could be powerful. He places the stock and bond holdings of America's Catholics and Protestants at roughly $21trn.

Straddling this chasm is the Roman Catholic church. In November Peter Turkson, a cardinal, issued the Vatican's highest-level statement on where money should be directed. Its list of 24 things to avoid abetting where possible is broad: addictive products and pornography; embryo research, which conservatives hate; and genetically modified seeds, opposed by ecoleftists. In America, where Catholic bishops have issued their own rules, some conservative scholars called the paper muddled.

Dylan Pahman of the Acton Institute, a religious think-thank, argues churches are delving too deeply into economics. Although it is right to cherish the planet, for instance, energy policies involve trade-offs and calculating them is not the business of theology, he says. Given the rancour of today's debate, his is likely to remain a voice in the wilderness.

China's property crisis

Disaster relief

HAIYANG

The Chinese state seeks to prevent a housing meltdown

TO JUDGE BY the high-rises dotted along the shore in Haiyang, a small coastal city, Country Garden's prospects are pretty meagre. The firm, China's biggest developer by sales, has sold few beachside flats. A handful of towers appear only partly built. A faux-German village with pointed roofs accommodates shops and restaurants, and adds a measure of flair. But it, too, is nearly empty. The company's failure to sell homes was made clear when its profits for the first half of 2022 nearly evaporated altogether.

Country Garden is not the only Chinese developer to have faced such difficulties. The volume of floor space sold across the country fell by 24% in 2022, the biggest slump since data became available in 1992. Meanwhile, property investment was down 10% year on year, the first drop on record. Cross-border defaults are also proving difficult. Evergrande, the world's most indebted developer, which collapsed in 2021, has still not produced a restructuring plan originally due in July. The firm's auditor, PwC, resigned on January 16th. This reduction in activity has been catastrophic for China's economy, which derives around a fifth of its GDP from property.

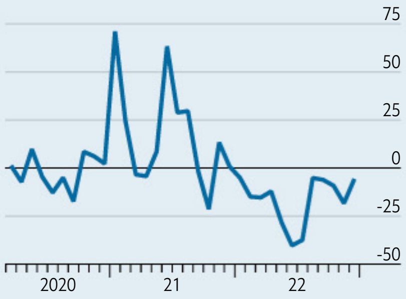
The country's officials are currently redesigning policy on a vast scale. The government has abandoned its "zero-covid" approach to the pandemic, while simultaneously signalling an end to a crackdown on technology firms. Policymakers are also trying to rescue the property industry. After two years of forcing developers to deleverage—which has pushed dozens to default on debts—regulators are now abandoning many of these measures in the hope of reviving sentiment. This has prompted a measure of optimism. Despite the bleak view in Haiyang, Country Garden's share price has trebled since October.

The exact contents of the government's reforms remain murky. On January 13th officials produced a draft 21-point plan which stated that the aim was to provide liquidity to "good-quality" developers. The task now is to differentiate between these companies and bad ones: no clear definition has been given of what constitutes good quality. The plan will also push policy banks to grant loans for stalled projects and state-owned asset managers to provide credit for mergers and acquisitions. Commercial banks, which had pulled back from property, have been told to start lending to reliable developers once again. And state media report that the "three-red-lines" policy, which capped debt, will be relaxed for 30 unnamed firms.

Laying the groundwork

China, housing completions

% change on a year earlier



Source: National Bureau of Statistics

Companies began rapidly raising new debt in December—a sign that policy easing kicked off well before the government announced the new measures. Local authorities have been lowering mortgage rates, and many are now at record lows. The state's bail-out funds are targeting unfinished construction. About 60% of homes sold between 2013 and 2020 are thought not to have been delivered to buyers, many of whom have nevertheless started to make payments. Without funding, construction projects have stalled and cannot be finished. Fear of unfinished homes has put off prospective buyers.

The state also wants to avoid more messy defaults. Country Garden made a last-minute payment to bondholders on January 17th. This was enabled by support from local governments, something few companies aside from those as big and important as Country Garden have at the moment. According to Refinitiv, a data firm, some 950bn yuan ($140bn) in offshore dollar debts alone will mature this year, up from 810bn yuan last year.

The plan is showing some early results. Home completions fell by 6% year on year in December, marking a recovery from the month before when they fell by 18% (see chart). This is a closely watched measure: unfinished homes prompted homebuyers to boycott their mortgage payments last year, as part of a wave of protests. The reforms have been assisted by the removal of covid-19 restrictions. A few weeks before the policy changes, moving about in Chinese cities (say, to look at a property) carried the threat of quarantine. Preliminary data from Beike Research Institute, a consultancy, suggest that sales of existing homes in 50 big Chinese cities may have risen by more than a fifth in the first ten days of the year, compared with the same period a month earlier.

Kaisa, a developer that defaulted in 2021, has been avoiding restructuring talks with foreign investors and looks to be far from an agreement with creditors. Yet despite its troubles, demand for the company's homes appears to be growing. Analysts from CreditSights, a research firm, recently visited a project in Shanghai and found agents were no longer offering discounts on flats. The absence of price cuts suggests demand is beginning to pick up for properties in good locations.

A few foreign investors have been encouraged by the state's plan. Firms have almost entirely been shut out from the offshore bond market, where many global asset managers and hedge funds are trying to recoup losses following missed payments. The funds raised by developers fell by a quarter last year compared with the year before. But on January 12th Dalian Wanda Commercial Management priced a $400m junk bond, the first in more than a year and a sign that some well-known developer-linked groups may slowly return to the offshore dollar-bond market in the coming year. Fidelity and BlackRock, two American asset managers, bought into the offering, according to Reorg, a research house.

Time for the tightrope

The reforms could bring about a stabilisation of the housing market and a slight rebound in sales in the second quarter of the year, according to analysts at Morgan Stanley, a bank—roughly what the government is hoping to achieve. But officials must tread a fine line. Too much funding would revive old problems of oversupply, and do so at a time when China's population is beginning to decline. Vacancy rates hit 7% in China's biggest cities last year and 12% in second-tier cities, much higher than the global average, reckons JPMorgan Chase, another bank. About 70% of homes sold since 2018 have been bought by people who already own at least one property.

Speculation has made Chinese homes the most expensive in the world on a price-to-income basis. Hong Hao of GROW Investment, an asset-management firm, says the three-red-lines policy at least obliged developers to slow the rate at which they took on debt. The campaign brought on huge problems for the Chinese economy, but without it "the situation would be much worse", he adds. If the government ends up pouring too much money into the bail-out it could lead to another wave of excess, and more empty seaside projects. ■

Free exchange | Fiscal fables

Have economists misunderstood inflation?

Imagine it is late 2024. Inflation in the rich world has fallen from its peak but stayed stubbornly high. At around 4%, it is well above the level at which most central banks are comfortable. Governments, weighed down by vast debts, must use precious revenues to pay interest on the debt, which itself is growing because of high interest rates. The energy transition and rising state spending owing to ageing populations add to the fiscal largesse. Raising taxes is politically fraught, so more money is printed. Inflation stays high and governments' credibility worsens. Central bankers are scratching their heads, wondering how their powerful weapon—the interest rate—has failed so thoroughly.

A wonkish theory, laid out in glorious detail in a new book by John Cochrane of Stanford University's Hoover Institution, would offer a potential explanation. "The Fiscal Theory of the Price Level" builds a theory of inflation as ambitious as that proposed by John Maynard Keynes's "The General Theory" or Milton Friedman's and Anna Schwartz's "A Monetary History". Mr Cochrane, whose own work on the subject spans four decades, spends nearly 600 pages reworking the maths of past economic models to incorporate fiscal theory, while chattily discussing how it explains past inflationary episodes. "[E]ven Milton Friedman might change his mind with new facts and experience at hand," he speculates.

At the heart of Mr Cochrane's theory is the idea that government debt can be valued like a firm's equity, based on the returns to its owner's pockets. The price level will adjust—and therefore drive inflation or deflation—to ensure that the real value of the debt equals the sum of a government's future budget surpluses, appropriately discounted. Thus the true driver of inflation is government debt not monetary policy. Under this theory, money is valuable because it can be used to pay tax and generate surpluses. The set-up is not all that different from the gold standard, except it is tax, rather than gold, that backs money.

Mr Cochrane is careful to note that the adjustment of the price level is not instantaneous. People can be poor judges of a government's credibility when it comes to paying off debts. Just like stocks, prices are able to deviate from fundamentals. Yet in the long run, they adjust. A government that hands out money without eventually running surpluses will not avoid inflation for ever.

History appears to offer support. Brad DeLong of the University of California, Berkeley, uses fiscal theory in his recent book, "Slouching towards Utopia", to explain inflation in post-first-world-war Europe. In France hefty debt-interest payments led to an average of 20% annual inflation over seven years. In Germany things were worse. The public lost faith in the ability of the state to pay off its debts without inflation. Soon hyperinflation kicked in.

Mr Cochrane also brings fiscal theory to bear on America's inflation in the 1970s-80s. In the mid-1970s price rises exceeded 12%. The Federal Reserve lifted interest rates; inflation dropped to 5% by 1977. Yet Mr Cochrane points out that inflation shot up again to more than 14% by 1980, in part because America failed to get its fiscal house in order. Fiscal and regulatory reforms that raised expectations of future surpluses, along with another dose of monetary medicine, were needed to vanquish inflation.

How is fiscal theory faring today? For a decade after the global financial crisis of 2007-09, prices stayed stubbornly low despite a ballooning supply of money and interest rates sitting at or below zero in much of the rich world. A "crude monetarism" predicted an inflationary surge, which did not materialise. Other revamped "New Keynesian" models also proved unhelpful. When governments spent big during the covid-19 pandemic, many economists, reasoning from recent history, were sanguine about the possibility of inflation.

Mr Cochrane argues fiscal theory can explain both the period of low inflation and the return of rapidly rising prices after the pandemic. Inflation was meagre in the 2010s, despite soaring government debts, because politicians promised to get their books in order and low interest rates meant consumers and bondholders were willing to wait. Yet during the pandemic, governments took a different approach. They dropped enormous cheques into consumers' pockets. The Fed purchased government debt immediately after its issuance. There was little talk of sustainability. Mr Cochrane argues that the direct nature of these "helicopter drops" informed people their newly fat pockets would not be drained by future taxes. Thus they were more willing to spend.

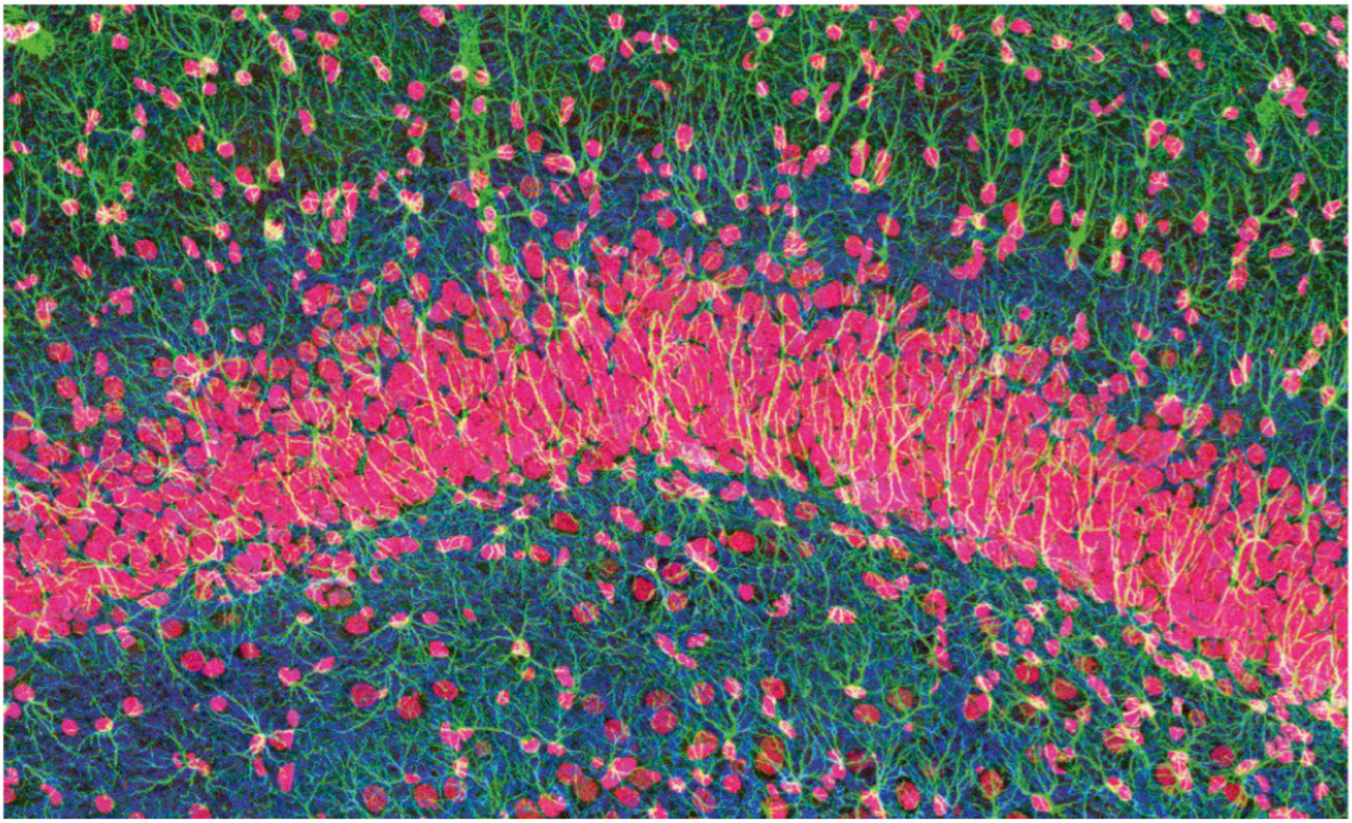
Heads I win, tails you lose

This story is perhaps too convenient. Indeed, Mr Cochrane admits that fiscal theory's flaw is it offers a way of explaining nearly any series of historical events in an unfalsifiable manner. Yes, other theories of inflation have problems. But if it is so hard to prove fiscal theory wrong, are they really in a fair fight? Mr Cochrane's story of how inflation ended in the 1980s is complicated by the fact that America actually cut taxes, suggesting politicians were not all that concerned by balanced budgets. Although deregulation may have boosted growth, many economists think the budget surpluses of the 1990s were mainly caused by globalisation and an IT boom, which few consumers in the 1980s saw coming.

Fiscal theory also offers limited guidance to policymakers beyond what is already well-known. Under its approach, monetary policy remains important: interest rates can spread out an increase in the price level over a period of time. In addition, the theory suggests governments must maintain credibility when it comes to paying off their debts—hardly a radical idea.

Fast-forward once again to late 2024. Imagine this time inflation has fallen to 2%. Interest rates are slowly coming down. Central bankers are running a victory lap. What of fiscal theory? Its supporters might take a victory lap, too, just as they would have done if inflation had remained high. ■

Science & technology



Neuroscience

The other brain cells

Neurons are not the only cells that think

Most people, if they think about the matter at all, probably think of thinking as something done by the huge network of specialised, electrically conductive cells called neurons that occupies the upper half of their skulls. And, as far as it goes, that is true. The 86bn neurons in a human brain do indeed do much of the cognitive heavy lifting. But not all of it.

Supporting them is a cast of three other varieties of brain cell—microglia, oligodendrocytes and astrocytes—collectively called glial cells (short for "neuroglia", from the Greek for "nerve glue"). Until recently, these were neglected by neurology. That has changed. Glial cells (their filaments stained green in the section of rat hippocampus pictured above, with neuron filaments stained blue and the nuclei of both stained red) are now fashionable topics of study. The results have blown away the idea that they are mere glue.

Microglia are gardeners. They prune links between neurons to keep the network in order. Oligodendrocytes, long dismissed as mere insulators of the electrically conductive fibres called axons via which neurons communicate, have crucial roles in tweaking axonic signals. And astrocytes, the most interesting of the lot, turn synapses—the junctions where axons meet and transfer signals—into the biological equivalents of transistors, by regulating the flow of information passing through them.

Out of 'cyte, out of mind

Nor are these results of merely academic interest. Misbehaving glial cells are now implicated in a range of conditions, from autism to multiple sclerosis to obsessive-compulsive disorder. Their study thus has important medical applications. They are also of concern to those who design the brain-simulacra called artificial neural networks, on which machine learning and artificial intelligence depend. So, while it remains true that neurons are the stars of the cranial theatre, the other actors' roles are being rapidly elucidated. And, with that, the play's plot is thickening.

For microglia, the crucial paper was published in 2012. In it Dorothy Schafer of Harvard Medical School and her colleagues showed that these cells prune synapses during brain development, and that this is a process which continues into a person's mid-20s. Beforehand, microglia had been viewed merely as parts of the immune system, important for mopping up pathogens and cellular debris, but basically Cinderellas. Dr Schafer turned them into belles of the ball. She found that, by hunting down and swallowing rarely used synapses, microglia keep the brain lean and mean, streamlining the computations neurons perform and ensuring the organ remains as efficient as possible.

The revelatory moment for oligodendrocytes came two years later, in 2014. Hitherto, their role, though well known, had also seemed humdrum. Oligodendrocytes produce myelin, a mixture of proteins and lipids which they wrap around axons, in outgrowths called sheaths, to improve those fibres' electrical conductivity. In that year, though, a team led by Armin

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Seidl of the University of Washington, in Seattle, discovered that oligodendrocytes use myelin to fine-tune the velocity of electric signals in axons.

For example, axons carrying signals from the left and right ears to a particular part of the auditory cortex will differ in length, so those signals might be expected to take different amounts of time to arrive. Oligodendrocyte fine-tuning (achieved by adjusting the diameter of the axon and of the distances between the nodes of the myelin sheath) compensates for this, meaning any remaining difference reflects the actual interval between the times of a sound's arrival at each ear. And it is that real difference which the brain uses to locate whence a sound has come.

It is the newly discovered abilities of astrocytes, however, that are really exciting researchers. These snowflake-shaped cells sport tendrils, each terminating in an appendage called an "end-foot". Every astrocyte governs a territory of its own, and these tessellate to form a three-dimensional mosaic across the brain.

Playing footsie

End-feet hunt down and envelop synapses, allowing astrocytes to eavesdrop on the chatter between neurons and then, by strengthening or weakening particular synapses, exert control over the computation done within networks of neurons. Consequently, there is now compelling evidence that astrocytes play a crucial role in memory formation, especially in the hippocampus, which consolidates relevant short-term memories into long-term ones.

Biopsies suggest that (depending on the brain region) astrocytes regulate between 50% and 90% of human-brain synapses in this way. Astrocytes' meddling is thus the rule, not the exception. Many researchers now talk of "tripartite" synapses as being standard in the brain. Their transistor-like three-element composition has one part (the astrocyte) which acts like a transistor's "base" connection, regulating the passage of signals between the other two (the neurons, the equivalents of a transistor's "emitter" and "collector"). Since transistors form the logic gates of computers, that is intriguing.

Moreover, astrocytes do not just meddle in the business of neurons. They also seem able to perform computations of their own. Where two astrocytes' territories meet, their tendrils can connect, letting them form networks like those of neurons. This permits them to communicate using pulses of calcium ions passed from the tendril of one cell to that of another.

Early in 2021 a team of researchers from Tampere University in Finland, led by Michael Barros, used gene-edited astrocytes to show that these calcium-ion signals can perform Boolean algebra, the language of digital computing. In particular, the team were able to run Boolean operations called AND and OR with a rate of accuracy of up to 90%. In 2022 Erik Peterson of Carnegie Mellon University, in Pittsburgh, published a mathematical proof showing that, in principle, an astrocyte network can run any computer algorithm imaginable. This hints astrocytes may form a secondary computational network, parallel to that of neurons, which is able to regulate the primary network via tripartite synapses.

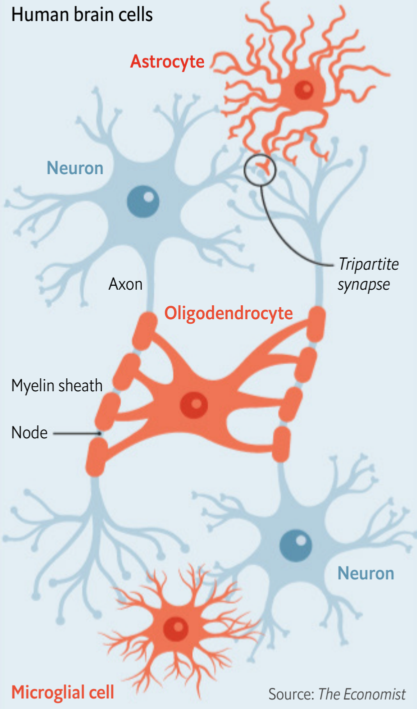
The emerging picture of the brain, then, is less an aristocracy—with neurons looking down on their glial inferiors—than a democratic society of cells working together to produce thoughts. In 2022 Alexey Semyanov and Alexei Verkhratsky of the Russian Academy of Sciences dubbed this idea the "active milieu" within the brain.

One consequence of the active milieu interpretation is a realisation that when glia misbehave there is trouble. A large body of evidence now suggests that dysfunctional glia play an important role in many neurological and psychiatric conditions.

Autism is one. In 2017 Ishizuka Kanako of the Nagoya Institute of Technology, in Japan, found a link between an increased risk of autism and the presence of a pair of genetic variants known to disrupt, in microglia, the expression of a protein called CX3CR1. And in 2020 Xu Zhixiang of Scripps Research, in San Diego, showed a range of microglial protein-synthesis problems cause autism-like symptoms in mice.

Current thinking is that misfiring microglia in people with autism fail to prune synapses thoroughly enough during brain development, resulting in overconnected brains with heightened sensitivity to stimuli, both sensory and emotional. Moreover, the effect that Dr Xu found disproportionately affects male mice—a bias that, perhaps not coincidentally, is also a feature of autism in human beings.

The unusual subjects
Human brain cells



Source: *The Economist*

In the past decade, meanwhile, several lines of evidence, including brain-imaging, post-mortem and genetic studies, have pointed to dysfunctional oligodendrocytes as the cause of psychosis in conditions like multiple sclerosis, bipolar disorder and schizophrenia. Such dysfunction disturbs the myelin on axons, disrupting the timing of their signals. The hypothesis is that this results in the hallucinations—imaginary sights and sounds—that are the defining feature of psychosis.

There is also compelling evidence that misfunctioning astrocytes play a role in mood disorders such as depression and anxiety, and in neurodegenerative diseases like Alzheimer's. Most strikingly, in 2021 Liam O'Leary at McGill University in Montreal reported that the brains of depressed suicide victims had markedly reduced densities of astrocytes, compared with healthy brains, in parts of the prefrontal cortex (the brain's executive), the caudate nucleus (which helps control goal-directed behaviour) and the thalamus (which passes sensory information to the cortex).

And it is not only psychiatrists who are inspired by the newly discovered roles of glia. Computer scientists are getting in on the act, too. Artificial neural networks are based on an early model of how neurons work—and, though subsequent investigation has shown this was simplistic, these networks' organisation into interconnected layers of neuron analogues does reflect that of the cerebral cortex. Understandably, therefore, some computer scientists have tried adding artificial glia to networks to see if their performance improves.

Transistorised, at half the price

It does. Several groups have discovered independently that getting rid of rarely used synapses, the job of microglia, helps artificial neural networks to encode new information and store memories. Coming up with ways to make neural networks sparser is now an important field.

Artificial astrocytes are also being investigated, along with the idea of artificial neuron-glia networks (ANGNS). These imitate tripartite synapses by using astrocyte analogues to strengthen and weaken synapses in response to how the rate at which those synapses fire changes over the course of time. When tested alongside conventional networks, ANGNS consistently outperform them. As with many things in human engineering, it seems that nature got there first. ■

Fertility

Tests of unreason

More evidence that hormone testing for women's fertility does not work

Women seeking to defer motherhood are often encouraged to check their fertility. Though fecundity is tied to age, the effect of time's passage varies. Some 35-year-olds find they cannot get pregnant. Others manage at the first attempt.

The main causes of fertility's reduction with advancing years are declines in the number and quality of the eggs in a woman's ovaries. Unlike men, who manufacture sperm throughout their post-pubertal lives, albeit in ever-decreasing quantities, all of a woman's potential eggs develop while she is still a fetus. A newborn girl has over 1m of them. By puberty, she is left with about 400,000. When the menopause arrives, that has been whittled down below 1,000, which are likely to be duds.

But fertility tests currently on offer neither count the number of eggs remaining nor assess their quality. Rather, they rely on an indirect approach—sampling what are hoped to be relevant hormones. Hormone tests do have some value in estimating the timing of menopause and the success of harvesting eggs for *in vitro* fertilisation. But forecasting pregnancy? The evidence suggests that they can't.

One test-sceptic is Anne Steiner of the Duke Fertility Centre, in North Carolina. She suspects hormone tests do indicate how many eggs are left to a woman, but that this is not what matters—rather, it is the eggs' quality which is crucial.

Between 2008 and 2016 Dr Steiner and her colleagues ran the Time to Conceive study. Its purpose was to determine whether hormone levels could indeed assess a woman's fertility, independent of her age. The team found then that those levels had no value in predicting pregnancy in the year subsequent to testing. Now, in a follow up to the original investigation, just published in *Fertility and Sterility*, Dr Steiner has shown that they have no longer-term predictive power, either.

Time to Conceive looked at 750 women aged between 30 and 44 who were living with a male partner not known to be infertile, had no diagnosis of infertility of their own, and had recently started trying to become pregnant. The team took blood and urine samples from these volunteers and measured levels of three hormones often examined by fertility tests. They then followed each volunteer for a year. The upshot, published in 2017, was that hormone levels were uncorrelated with pregnancy within the 12-month window through which the researchers were looking.

But perhaps, Dr Steiner subsequently speculated, that window was too narrow. In 2020 she therefore got back in touch with the original participants for a follow-up. She asked them if they would fill out a questionnaire about how many children they had had, how long it had taken to get pregnant and whether they had been diagnosed with infertility.

Some 336 of them agreed to participate. Among these there had been 239 pregnancies, resulting in 225 live births. More sadly, 73 participants were infertile. But the hormone levels in the tests carried out in the original study did not predict these outcomes. There was no difference, the researchers found, between women with poor results and those with normal ones.

In the case of one substance, for example—anti-Mullerian hormone, which is thought predictive because it is produced by cells in the egg-bearing follicles of the ovaries, and is thus believed to reflect the number of those follicles—79% of those with low levels of it went on to give birth. That was statistically indistinguishable from the 71% of mothers with normal levels. The decline in fertility, says Dr Steiner, is thus clearly not related to the decline in the quantity of eggs, but presumably to their quality. And how to measure that remains unknown. ■

Insect repellents

Buzz off!

A better way of keeping mosquitoes at bay is under development

Mosquito repellents have come a long way. For decades, the market leader was DEET, which fends the pests off successfully, but only for an hour or two. Recently, Icaridin has become available. This lasts up to eight hours and is just as effective. Yet both are mildly poisonous to cells grown in culture and their toxicity (if any) to human users is constantly debated. The search is thus on for something that is unquestionably not toxic at all.

Francesca Dani of the University of Florence, in Italy, thinks she might have the answer. As she and her colleagues describe in the *Journal of Agricultural and Food Chemistry*, they looked at a range of chemicals called aldehydes and ketones, and, with a bit of tweaking, produced something that seems a good, long-lasting, safe mosquito repellent.

Little bleeder

Dr Dani knew from the scientific literature that some aldehydes and ketones have insect-repelling properties. Such chemicals, however, vaporise faster than DEET. But she also knew from her own work that molecules called hydroxylated cyclic acetals, which form from certain aldehydes and ketones when exposed to an alcohol, evaporate much less readily. That, she thought, might be the key to the puzzle.

She and her colleagues therefore made a score of hydroxylated cyclic acetals and tested their mosquito-repelling qualities against those of DEET and Icaridin. The standard way to do this is to spray some onto the back of a volunteer's hand and have him or her then put both hands into a mosquito cage. The unsprayed hand acts as a control, and it is thereby possible to decide, by comparing the number of insects landing on each, how effective a repellent a particular chemical is.

As expected, DEET scored 95% protection efficiency (calculated by subtracting the number of mosquito probings on the treated hand from the number on the untreated one, dividing this by the number on the untreated one and then multiplying by 100). Such protection was granted by 8.3 micrograms of the stuff being applied per square centimetre of skin, and lasted two hours. For Icaridin, a fifth of that dose produces an equal repulsion for eight hours.

To the researchers' delight, two of their hydroxylated cyclic acetals performed as well as Icaridin. And when they tested them on cell cultures they found that one, called 12a in the paper for simplicity's sake, killed none of the cells exposed to it.

DEET and Icaridin have had good runs. DEET was developed in the 1940s, to help safeguard American soldiers from mosquito-borne diseases when on campaign. Icaridin, with its longer period of protection, arrived in the 2000s. If 12a passes muster, though, it may be that both will soon come to the ends of their useful lives. ■

Surveillance technology

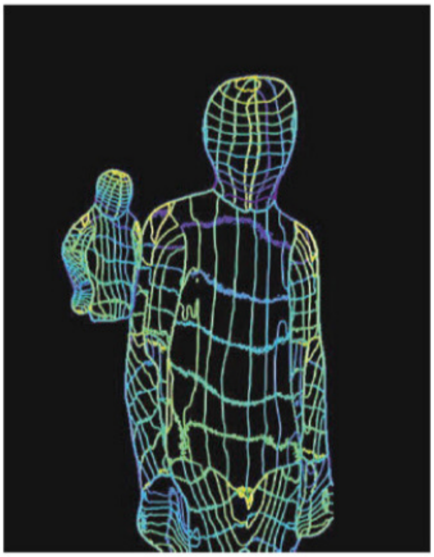
I spy, with my little Wi-Fi

Big Brother is watching you—even more than before

Like all radio waves, Wi-Fi signals undergo subtle shifts when they encounter objects—human beings included. These can reveal information about the shape and motion of what has been encountered, in a manner akin to the way a bat's chirps reveal obstacles and prey.

Starting from this premise Jiaqi Geng, Dong Huang and Fernando De la Torre, of Carnegie Mellon University, in Pittsburgh, wondered if they could use Wi-Fi to record the behaviour of people inside otherwise unobservable rooms. As they describe in a posting on arXiv, they have found that they can. "DensePose from Wi-Fi", the paper in question, describes how they ran Wi-Fi signals from a room with appropriate routers in it through an artificial-intelligence algorithm trained on signals from people engaging in various, known activities. This algorithm was able to reconstruct moving digital portraits, called pose estimations, of the individuals in the room.

Mr Geng, Dr Huang and Dr De la Torre are not the first to think of doing this. But they seem to have made a significant advance. Earlier experiments had managed to obtain two-dimensional (2D) pose estimations based on as many as 17 "vector points" on the body—such as head, chest, knees, elbows and hands. The new paper, by contrast, describes "2.5D" portraits that track 24 vector points (see picture). And, according Dr Huang, the team has now built an enhanced version capable of generating complete 3D body reconstructions that track thousands of vector points. Moreover, this work employed standard antennas of the sort used in household Wi-Fi routers. Previous efforts have relied on souped-up versions of the equipment.



No hiding place

Detailed Wi-Fi-based body-tracking with a standard-issue router would have many uses. Mr Geng, Dr Huang and Dr De la Torre talk of employing it to "monitor the well-being of elder people". A team working on similar technology, led by Yili Ren of Florida State University, suggests it could be used in interactive gaming and exercise monitoring. And, in 2016, Dina Katabi, Mingmin Zhao and Fadel Adib of the Computer Science and Artificial Intelligence Laboratory at the Massachusetts Institute of Technology demonstrated how Wi-Fi-like radio signals could detect a volunteer's heartbeat (and thus his or her emotional state) remotely.

These ideas are, however, distractions from what any such system would almost certainly be used for to start with, namely surveillance and espionage. In 2018, for example, Yanzi Zhu of the University of California, Santa Barbara and his colleagues showed how hackers posted outside someone's home could track the movements (though not then visualise the postures) of people inside, by intercepting escaping Wi-Fi signals.

It is easy to imagine who might be interested in the ability to turn any building's Wi-Fi network into a mini panopticon. Dr Huang declined to say who is sponsoring his team's work. However, another of their projects—developing techniques for detecting specific human behaviours in video-surveillance footage—is paid for by IARPA, the research hub of the Office of the Director of National Intelligence, which oversees America's spies. ■

Athletics

Bring me my bow of burning gold

A way to measure the effect of stress on performance in (some) athletes

How much stress is good for an athlete? Surprisingly, since modern, professional sport of all sorts now seems to be in the hands of number crunchers trying to extract another zillionth of a percent of performance from their charges, no one knows. The reason is that, to avoid decrements in performance of equal and opposite magnitude, top athletes are rarely willing to carry even the tiniest monitoring devices when in competition. And when they are not in competition such measurements would be meaningless.

However, two behavioural economists, Lu Yunfeng of Nanjing University, in China, and Zhong Songfa of the National University of Singapore, think they have found a way around this—at least for athletes whose disciplines do not require them to move a lot.

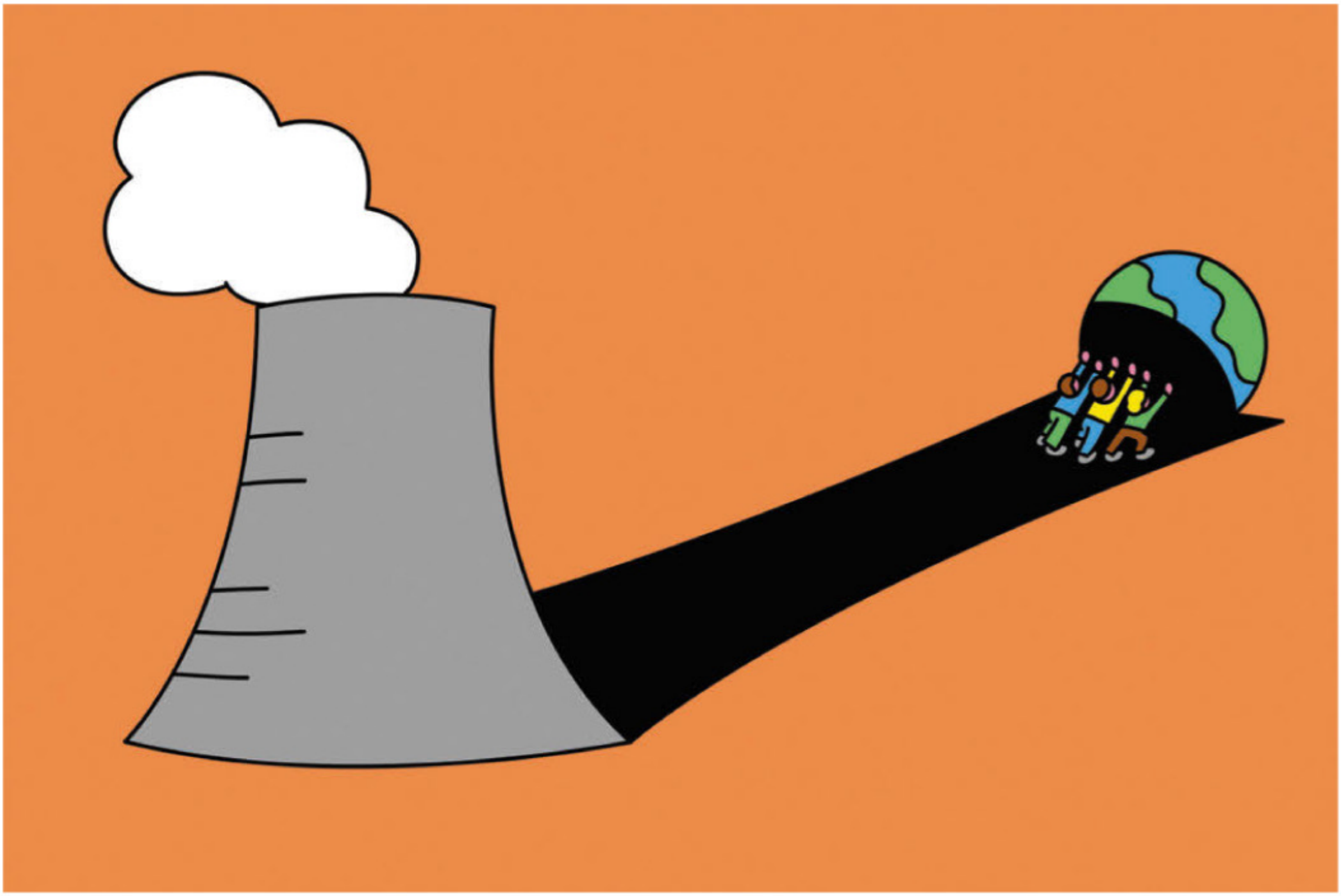
Dr Lu was inspired to investigate the matter when watching the 2020 Olympic games on television. He noticed that in the archery contests, competitors' heart rates were shown to viewers as they stood at the mark and shot. Heart rate is well known as an indicator of psychological stress, so he saw this as an opportunity to investigate the relation between stress and performance. To this end, he recruited Dr Zhong, who has a long history of working on stress and behaviour.

When they dug into the matter, the two researchers found that 122 of the 128 archers in the games had agreed to have their heart rates measured. The trick was that, since competitors were stationary, their heart rates could be monitored remotely by a technique called photoplethysmography, which registers changes in the reflectivity of skin caused by flushing when the heart pumps, and correlates well with more conventional measurements such as electrocardiograms. Altogether, they were able to match heart rate to score for 2,247 shots.

As they report in a paper in *Psychological Science*, heart rates during the competition varied tremendously between archers. A few hearts pumped at just over one beat per second while one competitor's raced along at more than three. The average was 138 beats per minute.

Overall, archers with higher heart rates had lower scores and those with lower rates, higher ones. The average rate for a toxophilite who hit inner gold, or ten-ring (a bullseye, to non-cognoscenti), for a score of ten, was 134.2 beats per minute. It was 135.7 for outer gold (nine-ring). And for eight-ring, the inner red, it was 137.9. Overall, Dr Zhong and Dr Lu calculated that each extra heartbeat per minute resulted in a 0.004-point decrease in score.

These findings support the notion that the performance of even some of the world's most elite athletes declines as they experience increased stress. Whether that is peculiar to those who need a steady aim to win, or also applies to athletes who have to run around as they compete, remains to be seen. ■



The future of energy

A long goodbye

In the struggle to give up fossil fuels, is innovation a necessity or a distraction?

No Miracles Needed. By Mark Jacobson. *Cambridge University Press; 400 pages; $14.99 and £11.99*

"THE STONE AGE did not end for lack of stone, and the Oil Age will end long before the world runs out of oil." That sounds like the oath of environmentalists opposed to the use of fossil fuels. In fact, the prediction was made by Sheikh Zaki Yamani, a Saudi Arabian oil minister who shot to prominence as the face of the Arab oil embargo of 1973. He was convinced that innovations in alternative energy sources and fuels would ultimately loosen oil's grip on the global economy.

It has not happened yet. This year marks the 50th anniversary of the first oil shock. Far from innovating its way to a clean-energy future, the world slipped into complacency as the disruptions of the 1970s faded from memory. Oil, coal and natural gas still make up over four-fifths of the world's primary energy supply. That addiction—plus a concatenation of war, policy mistakes and economic trends—has now inflicted another energy crunch on the world. Will this squeeze also be forgotten, or could it lead to an overdue revolution in energy?

There are two reasons to think change is coming. The first force is familiar: geopolitics. Five decades ago, it was the oiligopolists of the OPEC cartel who clumsily manipulated energy markets. This time Russia, an oil-and-gas powerhouse, has provided an ugly reminder of the dangers of relying on nasty authoritarian regimes. The second factor is rising anxiety about climate change. To avoid its worst effects, almost 200 countries have agreed to restrain emissions of greenhouse gases (GHGs); many are already moving towards a decarbonised energy system. Those twin forces have redoubled efforts to phase out fossil fuels.

Responding to cuts in gas supplies from Russia, the European Commission has put in place aggressive policies to ramp up home-grown renewable alternatives, including electricity from wind power and green hydrogen. The International Energy Agency (IEA), an official forecaster, predicts that full implementation of existing policies alone will lead to peaks in global consumption of coal and gas by 2030 and of oil by the mid-2030s. The hard question is what happens after that. Will innovation end the Oil Age, as Yamani predicted?

That hope is championed by a camp of thinkers which includes Bill Gates, the co-founder of Microsoft. In an influential recent book, Mr Gates argued that the pressing need to decarbonise the global ▸▸

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economy requires big bets on a variety of nascent but promising technologies, ranging from advanced nuclear energy to "direct air capture" of GHGs. He warned against placing too much faith in wind and solar power, highlighting the constraints imposed by their intermittent generation.

Investing in potential breakthroughs may seem uncontroversial. John Kerry, America's special presidential envoy for climate change, discovered it is not. In the run-up to a UN climate summit in Glasgow in 2021, he pointed to scientific assessments suggesting that perhaps half of GHG reductions needed by the middle of this century will "come from technologies we don't yet have". Mr Kerry was denounced by those who saw that as an attack on existing technologies. Michael Mann, a climate scientist, dismissed his comment as "pernicious technophilia". Greta Thunberg, an activist, declared: "Great news! I spoke with Harry Potter and he said he will team up with Gandalf, Sherlock Holmes and the Avengers and get started right away!"

Blow, winds, and crack your cheeks

Now Mark Jacobson, an influential engineering professor at Stanford University—whose research was the basis of the policy approach known as "the Green New Deal"—is furthering the debate. In "No Miracles Needed" he says the world must urgently tackle the related scourges of global warming, energy insecurity and local air pollution. This, he insists, will require no "miracle technologies". On the contrary, "we have 95% of the technologies that we need already commercially available. We also know how to build the rest." The heart of his plan is a dramatic expansion of wind and solar power (alongside some hydro- and geothermal energy) and, relatedly, of energy storage and transmission.

At first blush, that sounds plausible. Wind and solar are not only commercially viable and operating at scale around the world; they are the cheapest forms of new power generation in most countries. Renewable capacity is set to grow by 2,400GW from 2022 to 2027, equal to the entire power capacity in China today.

Meanwhile, the technologies involved in power transmission are so well-established that America's National Academy of Engineering hailed grid electrification as the greatest engineering feat of the 20th century. And though energy storage is not yet ubiquitous and affordable, large battery-based systems are operating successfully on grids from California to Australia.

Professor Jacobson's scholarly and analytical book is persuasive in other ways, too. In common with Mr Gates, he believes everything that can reasonably be electrified should be. He rightly denounces the inefficiency of internal-combustion engines and other fossil-burning generators in comparison with electric alternatives. He acknowledges that long-distance transport and certain industrial applications will require fuels such as hydrogen, rather than electricity, if they are to be decarbonised. And he cleverly rebuts concerns about the variability of wind and solar generation: big power plants, he notes, are themselves often unavailable owing to scheduled maintenance and outages. Much of France's nuclear fleet has recently been offline, wreaking havoc on its grid.

But there are two wrinkles in his argument. One is overreach. Other proponents of rapid decarbonisation advocate using renewables for the great majority of power within a couple of decades. Professor Jacobson wants them to cover a full 100% by 2035. "Did Magellan aspire to circumnavigate 99% of his way around the Earth?"

Yet a big study by America's Department of Energy in 2021 found that, though getting close to 100% could be cost-effective, the final few percent would be disproportionately pricey. A dash to supersize what are still smallish industries could stumble on bunged-up supply chains and shortages of talent. Other obstacles liable to raise costs and cause delays include NIMBYism and regulatory backlogs. In America proposed solar projects dawdle in queues for interconnection for more than twice as long as in 2005. In each of Germany, Italy, Poland and Spain, over eight times as much wind capacity is waiting for permits as is under construction. Professor Jacobson acknowledges these problems but has no convincing answers to them.

The second flaw in his case is that, by forswearing technological "miracles", it is needlessly dismissive of potential game-changers such as nuclear fusion, a risky but alluring long-term bet that has recently attracted billions of dollars in private investment. The UN's authoritative Intergovernmental Panel on Climate Change keeps the door open to various technologies for carbon-dioxide removal (CDR), from direct air capture of GHGs with giant machines to the use of carbon capture and sequestration in the generation of bioenergy. The author wants to rule out such kit, in part because he thinks it is less green than wind or solar and "diverts funding from lower-cost renewables".

That is a false economy. The IEA, which is firmly with Professor Jacobson in calling for a peak in fossil consumption, nevertheless insists getting to net-zero GHG emissions by 2050—a goal adopted by many countries—requires "massive leaps in innovation" in advanced batteries, hydrogen, synthetic fuels, carbon capture and other technologies that are not yet commercial. "This is a Herculean task," Fatih Birol, the agency's boss, has said. Pressing on without investing in breakthrough innovation would make it even harder. ■

Balkan landscapes

The same river twice

Elixir. By Kapka Kassabova. *Graywolf Press; 400 pages; $18. Jonathan Cape; £20*

The Scottish Highlands and the mountain valleys of Bulgaria are among the wildest places in Europe, measured by their variety of flora and fauna. Both locales are dear to the heart of Kapka Kassabova—and as she roams the south-eastern extremes of Europe, her mind keeps returning to Scotland.

Hers has been a life of seamlessly accomplished switching. Born in Sofia, Bulgaria's capital, in communist times, she changed languages after migrating to New Zealand as a teenager. She moved to Edinburgh in 2005, later settling in a remote riverside spot, near Inverness, which surprised her with daily intimations of "joy for no reason", and connected her with the childhood summers she spent in the care of rural grandparents.

That goes some way to explain her ability to enter the pre-modern world of Bulgarian valley-dwellers and write about it in subtle prose that mingles empathy with perspective. Her previous books have explored parts of the Balkans convulsed by geopolitics but better understood, she argues, through the prisms of geography and geology. Her new book adds another lens: botany. It is about Bulgarian people, places and plants on either side of a mighty river called Nestos by the ancient geographer Ptolemy, Mesta by the Bulgarians and Ka-

Valleys that time forgot

rasu (“black water”) by the Turks.

One sketch after another introduces characters who, in various senses, have deep roots in that landscape. Rocky, a man with milky blue eyes and a “humousy smell”, runs a little business selling fungi and herbs; he hires the author to lug crates of earthy stuff in return for instruction in the surprising properties of the local foliage. The root of burdock, Ms Kassabova learns, turns sweet if you boil it for long enough, and can soothe several ailments.

Then there is her new friend Gyulten, whose name means “rose skin” in Turkish. A “wildish” ponytailed grandmother, she was married at 15 on the instructions of her pastoralist father and found herself widowed by 45—leaving her alone to battle, successfully, with cancer. She reports that herbs worked when conventional medicine had given up.

Meeting such people, Ms Kassabova has the sense of connecting with a European substratum of lore and folk religion that clerical and worldly authorities tried hard to suppress. She admiringly recalls Nicholas Culpeper, an English herbalist of the 17th century who denounced priests, physicians and lawyers as unworthy and self-serving gatekeepers of knowledge.

All this might sound contrived for urban readers with a modish yearning for Shangri-La. But on the whole the author has enough humour, vulnerability and self-awareness to avoid sinking into bourgeois nostalgia. In any case, as she makes clear in passing, this is no lotus-eating land where wonderful plants keep cruelty at bay. On the contrary, the people she meets are survivors of—or possibly collaborators with—a form of communism that abused the Pomaks, a community of Muslims who speak a version of Bulgarian and straddle the border with Greece. In the early 1970s Bulgaria’s army shot many who refused to change their Islamic names.

Yet these interlocutors, being hardy highlanders, seem remarkably unscathed. Even their Islam seems a light covering for more ancient forms of veneration. If anything threatened their way of life it was, apparently, the fall of communism and the lure of the richer parts of the European Union. Although she does not make the point explicitly, this precarious survival forms a striking counterpoint to Ms Kassabova’s other beloved landscape. For reasons to do with the Highland clearances of 200 years ago, when sheep replaced peasants, her Caledonian riverbank is pretty empty; many who do live there are, like her, newcomers in search of tranquillity.

Her Balkan heartland has experienced at least as much collective trauma, and far more recently, but its people and parts of their traditional way of life have endured. For how much longer, Ms Kassabova’s readers are left wondering. ■

Panoramic fiction

The course of true love

The World and All That It Holds. By Aleksandar Hemon. *MCD; 352 pages; $28. Picador; £18.99*

“YOU GO TO sleep in one world, wake up in another,” muses the narrator of Aleksandar Hemon’s fourth novel. Something similar happened to the Sarajevo-born author himself. In 1992 the implosion of Yugoslavia shattered his Bosnian homeland and left him stranded in Chicago. He weathered odd jobs and hard knocks to emerge—with the publication in 2000 of his short-story collection, “The Question of Bruno”—as an English-language writer of verbal agility and ethical finesse.

Migration, dispossession and their legacies run through his work. “I live for tales of displacement and oblivion,” this book’s afterword acknowledges. “The World and All That It Holds” is both ampler and simpler than some of his past experiments. Its story of love, hope and survival traverses the Eurasian land mass and the 20th century, from the trenches of the first world war to the chaos of occupied Shanghai.

The story begins in June 1914. An assassin’s bullets slay the Habsburg heirs in Sarajevo, and an epoch ends. Soon, in the blood-drenched dugouts of Galicia, the Jewish pharmacist Rafael Pinto meets—and falls in love with—a Muslim fellow Sarajevan, Osman Karisik. Their secret passion will span decades of mayhem, in which they arduously learn that “Cities come and go, as do worlds, as do souls.”

Mr Hemon’s nightmarish battle scenes, offset by the couple’s ecstatic, defiant sensuality, have a visceral impact. Indeed, these “hard and heavy days” of war and desire overshadow the novel’s later acts. After capture by Russians, Pinto and Osman reunite in post-revolutionary Tashkent with baby Rahela (possibly Osman’s daughter) in tow, before dodging Red and White warlords along the Silk Road. Into this lavish tableau of slaughter and adventure, Mr Hemon weaves the yarns of an enigmatic British spy, Major Moser-Ethering. This fruity fabulist, with “few regrets and no contrition”, may owe something to the style of Marshal Tito’s old pal, Sir Fitzroy Maclean.

Osman vanishes on the plains of Turkestan. His kindly, merry spirit remains a constant guide for Pinto as the story leaps across wars and years in a splintered, lyrical chronicle. Pinto and Rahela join the émigré flotsam in the Shanghai of the 1930s, their self-fashioned father-daughter bond—sealed by a private argot of Bosnian, Ladino and German—supplying emotional ballast. Mr Hemon’s scene-painting has flair and colour but can feel secondhand: pre-cut backcloth, not background.

Pinto loses Rahela to a scheming American until, in 1949, the Communist takeover of China spins fortune’s wheel again. A poignant epilogue, set in Jerusalem in 2001, returns to the frontier zone between fact and fiction, memory and history, where Mr Hemon thrives. His novel encompasses thrilling sequences and flatter patches of period melodrama. Yet within this widescreen epic, he drills as piercingly as ever into the questions of language and freedom, choice and chance, that made the refugee a writer. “You cannot fathom my rules,” Pinto’s God insists. Literature, and love, must make their own. ■

It started in Sarajevo

World in a dish

Eating to 100

America has healthy cuisines—if you know where to look

Nearly 70% of American adults are overweight; over a third are obese. Grocery shops contain aisle after aisle of salty crisps, sugary drinks and processed snacks. Cues to eat unhealthily abound. But if this is your archetypal American diet, argues Dan Buettner in "The Blue Zones American Kitchen", a work of anthropological reporting posing as a cookbook, you are looking in the wrong places.

Mr Buettner studies and writes about "Blue Zones", areas where people tend to live long, healthy lives, with unusually high numbers of centenarians and long life expectancy in middle age. In this book, he finds the principles of Blue Zone diets—very little meat and processed foods, with most calories coming from whole grains, greens, tubers, nuts and beans—in the cuisines of four demographic groups: Native Americans, African-Americans, Latinos and Asian-Americans.

The recipes that Mr Buettner presents do not necessarily represent what most people in these groups actually eat. For a variety of reasons, for instance, Native Americans and Latinos suffer higher obesity rates than non-Hispanic whites—which would probably not be the case if they all ate as this book recommends. But, historically, each of these groups had healthy cuisines, and Mr Buettner talks to people trying to revive them.

African-American cuisine is often unfairly maligned for over-relying on fried and processed foods. Mr Buettner says this aspect of it is an artefact of the Great Migration, when black people left bountiful gardens in the South, which provided greens, beans and root vegetables, for industrial northern cities. And so the recipes in this part of the book feature crops such as okra, collard greens and Carolina Gold rice, a delicious west African strain. All these played crucial roles in African-American diets for centuries.

Diverse as the recipes collected here are, most rely on seasonal, fresh produce, often home-grown. Mr Buettner recounts his confusion when following his GPS directions to meet a Hmong woman in her garden, and ending up in the car park of Target, a department store. Behind a row of trees, he found a five-acre garden bought by Hmong refugees in the 1970s that, he says, "looked like Cambodia in the morning, [with] fields of bitter melon and zucchini, and people walking around with wicker baskets."

He says the encounter left him convinced that "there's so much culinary genius in America that also lines up perfectly with the dietary patterns that produced the longest-lived humans in history. It's so easy if you look for it." The truth is a bit more complicated. For urbanites without a garden, these recipes may prove expensive and time-consuming. And as Mr Buettner's other work on Blue Zones attests, food is just one part of the longevity puzzle. Centenarians tend to live active, purposeful lives centred on family and community.

So this book is not a shortcut to a 100th birthday. But anyone who wants a shot at a century should probably eat less meat and munch more legumes and whole grains. ■

England's revolutionary century

Heady times

The Blazing World. By Jonathan Healey.
Knopf; 512 pages; $38. Bloomsbury; £30

Writing an accessible history of Britain in the turbulent 17th century, as Jonathan Healey sets out to do in "The Blazing World", is a noble aim. Starting with the seeds of one revolution and ending with a second, the period teems with ideas about what it means to be a citizen as opposed to a subject, and about how God should be worshipped. By the end of it, a modern concept of the state was emerging. Yet even in Britain it is neglected.

At the turn of the century nine out of ten people lived in the countryside. A tiny minority were literate. Famine and plague were regular scourges; a rising population and stagnant economy spelt misery. Fear of witchcraft was common, as were executions for petty crimes. Fornication could land you in court. By 1700 trade had replaced farming as the mainstay of a burgeoning market economy. Relief from extreme poverty was mandated by Parliament. Towns were hubs of commerce and culture; religious dissent was accepted by a relatively tolerant Anglican elite. Rich Protestant England was a force in Europe.

A continuous thread runs from the accession of England's first Stuart king, James I, in 1603, to the dynasty's fall in the so-called Glorious Revolution of 1688-89. Yet historians often balk at telling the tumultuous, ideologically charged story in one go. Often it is divided into three chunks. First come increasing resistance to absolutism and religious intolerance, civil war, the parliamentary army's victory, the execution of Charles I, and the establishment of the Protectorate under Oliver Cromwell. Next, the monarchy's restoration under Charles II; finally, the disastrous reign of James II and invitation to William of Orange to take his place and establish a proto-constitutional monarchy.

Mr Healey takes on the whole saga in under 500 pages. It begins when the first James acceded to the throne and was struck by England's apparent wealth compared with his native Scotland. But the monarchy itself was chronically broke, a condition made worse by the excesses of his court. Tension ensued between his need for cash (he even sold peerages) and Parliament's traditional control over the royal purse strings. In an era in which absolutism had become the norm across Europe—but was a relatively newfangled

Back Story Nobody's perfect

A stage adaptation of "Some Like It Hot" underscores the genius of the original

They were shooting the ending of "Some Like It Hot" but didn't have a final line. I.A.L. Diamond urged Billy Wilder, his co-writer and the director, to use a quip cut from an earlier scene. So it was that when Osgood, the dappy millionaire played by Joe E. Brown, learns that Daphne, his fiancée (Jack Lemmon), is secretly a man, he responds: "Nobody's perfect." In a raucous new musical at the Shubert Theatre on Broadway, the line is revised. "I think you're perfect," Osgood tells Daphne, previously known as Jerry.

It is invidious to compare a film of 1959 with a musical adaptation staged today. And not just any film: "Some Like It Hot" is one of the greatest of all time and probably the best comedy. Invidious but inevitable, and instructive: about the distance between then and now, the virtues of subtlety and the rich grey areas to be found in black-and-white movies.

The sign-off is immortal, but almost every line is a punchline in Diamond's and Wilder's screenplay, in which two hapless male musicians in Prohibition-era Chicago witness a gangland massacre, then disguise themselves as women in an all-girl band. The rows on set became legendary, but the result is alchemy. Marilyn Monroe's tragic real-life despair suffuses her portrayal of Sugar, a boozy ukulele player who always gets "the fuzzy end of the lollipop". The spark between Monroe and Tony Curtis (playing Joe, Jerry's partner in mime) ignites on screen. The nights Wilder had spent in Weimar nightclubs before emigrating reverberate in the jazzy mood.

The musical retains most of the plot and some of the dialogue and gags. But amid the new songs—several of them corkers—and the roof-lifting choreography, the story has been tweaked. In a delirious screen sequence that might now be called post-modern, Curtis's character impersonates a millionaire to seduce Monroe's, imitating Cary Grant's accent as part of the act. Here, in a nod to Wilder, he pretends to be a German screenwriter.

Other changes are bigger, and more telling. Like a lot of mid-century American cinema, "Some Like It Hot" dealt with the question of race by ignoring it. On stage, Sugar (Adrianna Hicks) is black, as are Jerry/Daphne (J. Harrison Ghee) and the band leader, Sweet Sue (NaTasha Yvette Williams). "No use livin' in the past," Sue sings in the opening number. In the film, the all-white band takes the train to Florida; the theatrical version abjures the segregated South and heads to California.

This is a salutary update. The gender politics have been revamped too. The film draws some broad laughs from the spectacle of men wobbling on high heels. That is very 1959. In the new musical, Jerry is liberated and exhilarated by becoming Daphne. "The lady that I'm lovin' is *me*," sings Ghee—who, offstage, is non-binary—in an ode to gender fluidity.

It is natural to think that the present always knows best. Often it does. Gender nonconformity wasn't as much of a thing in 1959; or rather, not in the same way, or with the same vocabulary. Sometimes, though, wisdom and compassion operate in disguise.

Amid the smooching, innuendoes and couchette parties, the film's most radical moment comes in a less famous line (kept on stage). "I'm Daphne," says Lemmon's character when first introduced as a woman, spontaneously ditching her intended name, Geraldine. An independent persona is born, which—comically yet sincerely—soon takes off and over. As Curtis put it in a racy memoir of the movie, the implication is that "a person can be more than one thing."

The straight relationships are a critique dressed up as a cartoon. Voluptuous Sugar is deceived by caddish Joe, but when the gangsters reappear, as they must, Joe, like Daphne, is a different person. Newly aware that too many men are "rough hairy beasts", his masculinity has been detoxified. You could even say that the slapstick, speakeasies and mobsters bursting out of giant cakes are all a cover for Wilder's morals of transformation and respect. He just doesn't make a song and dance about them.

The subtlety of his screwball masterpiece peaks in that last line. The replacement, "I think you're perfect," is an uplifting sentiment, well-suited to the brio of musical theatre and to an age that craves affirmation. The magic of "Nobody's perfect" is that it is unexpected, but also that it is true. Nothing and nobody is flawless in the fallen world Wilder knew and depicted, in which jokes are entwined with jeopardy, high jinks with woe, and wrenching hope from hardship is victory enough. That is the difference between a good night out and genius.

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notion in England—such restraints were seen first by James, then by his son Charles, as a direct challenge to the "divine right of kings". All the dynasty's calamities sprang from this clash.

A far less canny operator than his father, the priggish Charles I was widely seen to be trampling over ancient English liberties. Initially, this was a bigger cause for rebellion than the novel idea of government by and for the people: that developed later, particularly in the ranks of the radicalised parliamentary army. When the civil war began in 1642, nobody thought it would lead to the decapitation of a king and advent of a republic (albeit a short-lived one).

Wily and pragmatic as well as louche, Charles II may have been the only Stuart to see that public opinion, fed by the proliferating news-sheets and pamphlets, could confer or deny legitimacy. The clumsy attempt by James II, a Catholic, to restore absolutist rule was always doomed to failure. The ferment of ideas about politics, society and religion led inexorably to his ousting in the Glorious Revolution—and Britain's emergence as a stable modern state.

The tempo never slackens in this erudite book. But sometimes the reader feels bombarded by detail (all those parliaments, the Short, the Long, the Rump…). Worse, there is too little attempt to flesh out the luminaries of the age, such as the outrageous editor and propagandist Marchamont Nedham, or John Lambert, the brilliant parliamentary general who drafted England's first written constitution, and whom the author thinks would have made a more enlightened Lord Protector than Cromwell. Mr Healey's is avowedly a narrative history. A bit more attention to its characters would not have gone amiss. ■

Economic & financial indicators

Economic data

	Gross domestic product % change on year ago latest		quarter*	2022[†]	Consumer prices % change on year ago latest		2022[†]	Unemployment rate %		Current-account balance % of GDP, 2022[†]	Budget balance % of GDP, 2022[†]	Interest rates 10-yr gov't bonds latest,%		change on year ago, bp	Currency units per $ Jan 25th	% change on year ago
United States	1.9	Q3	3.2	2.1	6.5	Dec	8.0	3.5	Dec	-3.7	-5.5	3.5		168	-	
China	2.9	Q4	nil	3.1	1.8	Dec	1.9	5.5	Dec[‡§]	2.4	-5.6	2.8	[§§]	36.0	6.78	-6.8
Japan	1.5	Q3	-0.8	1.4	4.0	Dec	2.5	2.5	Nov	1.6	-6.3	nil		-8.0	130	-12.1
Britain	1.9	Q3	-1.2	4.0	10.5	Dec	7.9	3.7	Oct[††]	-5.9	-6.8	3.4		224	0.81	-8.6
Canada	3.9	Q3	2.9	3.4	6.3	Dec	6.7	5.0	Dec	-0.6	-2.2	2.8		100	1.34	-6.0
Euro area	2.3	Q3	1.2	3.2	9.2	Dec	8.4	6.5	Nov	0.9	-4.0	2.1		223	0.92	-3.3
Austria	1.7	Q3	0.9[‡]	4.9	10.2	Dec	8.6	5.6	Nov	-0.5	-3.6	2.7		253	0.92	-3.3
Belgium	1.9	Q3	0.8	2.7	10.4	Dec	10.2	5.5	Nov	-2.4	-4.8	2.8		251	0.92	-3.3
France	1.0	Q3	0.7	2.5	5.9	Dec	6.0	7.0	Nov	-1.9	-5.3	2.7		233	0.92	-3.3
Germany	1.3	Q3	1.6	1.7	8.6	Dec	8.7	3.0	Nov	4.2	-3.5	2.1		223	0.92	-3.3
Greece	2.1	Q3	-2.1	5.0	7.2	Dec	9.4	11.4	Nov	-5.8	-4.5	4.2		256	0.92	-3.3
Italy	2.6	Q3	1.9	3.9	11.6	Dec	8.7	7.8	Nov	-0.9	-5.6	4.1		273	0.92	-3.3
Netherlands	3.1	Q3	-0.9	4.3	9.6	Dec	11.6	3.5	Dec	6.4	-1.4	2.5		241	0.92	-3.3
Spain	4.4	Q3	0.2	5.2	5.7	Dec	8.3	12.4	Nov	0.5	-4.3	3.1		247	0.92	-3.3
Czech Republic	1.6	Q3	-1.0	2.5	15.8	Dec	15.1	2.7	Nov[‡]	-2.4	-5.1	4.4		118	21.8	-0.3
Denmark	3.2	Q3	1.1	2.8	8.7	Dec	7.9	2.6	Nov	9.0	0.9	2.4		226	6.82	-3.2
Norway	2.5	Q3	6.3	3.5	5.9	Dec	6.4	3.2	Oct[‡‡]	18.8	12.2	1.4		76.0	9.93	-9.6
Poland	4.5	Q3	4.1	4.5	16.6	Dec	14.4	5.2	Dec[§]	-3.7	-3.7	5.9		198	4.33	-6.0
Russia	-3.7	Q3	na	-2.3	11.9	Dec	13.2	3.7	Nov[§]	12.3	-1.1	10.5		78.0	69.3	14.3
Sweden	2.6	Q3	2.4	2.9	12.3	Dec	7.7	6.4	Nov[§]	3.8	-0.5	2.1		180	10.3	-9.4
Switzerland	0.5	Q3	1.0	2.0	2.8	Dec	3.0	1.9	Dec	5.2	-1.0	1.1		113	0.92	nil
Turkey	3.9	Q3	-0.5	5.1	64.3	Dec	73.5	9.9	Nov[§]	-8.1	-3.4	9.9		-1148	18.8	-28.4
Australia	5.9	Q3	2.6	3.5	7.8	Q4	6.4	3.5	Dec	2.1	-1.9	3.5		158	1.41	-0.7
Hong Kong	-4.5	Q3	-10.0	-2.7	2.0	Dec	1.9	3.5	Dec[‡‡]	4.2	-3.4	3.0		144	7.83	-0.5
India	6.3	Q3	19.3	6.9	5.7	Dec	6.5	8.3	Dec	-2.7	-6.4	7.3		69.0	81.6	-8.3
Indonesia	5.7	Q3	na	5.1	5.5	Dec	4.2	5.9	Q3[§]	1.1	-3.8	6.7		27.0	14,965	-4.1
Malaysia	14.2	Q3	na	7.3	3.8	Dec	3.4	3.6	Nov[§]	2.4	-5.3	3.7		nil	4.26	-1.6
Pakistan	6.2	2022**	na	6.2	24.5	Dec	19.9	6.3	2021	-3.9	-7.8	14.3	[†††]	270	231	-23.6
Philippines	7.2	Q4	12.1	7.7	8.1	Dec	5.6	4.5	Q4[§]	-4.0	-7.7	6.0		105	54.6	-6.2
Singapore	2.2	Q4	0.8	3.5	6.5	Dec	6.1	2.1	Q3	18.7	-1.0	2.8		103	1.31	2.3
South Korea	1.3	Q4	-1.5	2.6	5.0	Dec	5.1	3.0	Dec[§]	1.2	-3.1	3.2		65.0	1,232	-2.7
Taiwan	-0.9	Q4	-4.3	3.0	2.7	Dec	2.9	3.6	Dec	13.0	-0.3	1.2		53.0	30.4	-8.8
Thailand	4.5	Q3	5.0	3.2	5.9	Dec	6.1	1.4	Oct[§]	-1.8	-5.0	2.5		57.0	32.8	0.7
Argentina	5.9	Q3	7.0	5.7	94.8	Dec	72.5	7.1	Q3[§]	-1.0	-4.2	na		na	185	-43.5
Brazil	3.6	Q3	1.6	2.8	5.8	Dec	9.3	8.1	Nov[§‡‡]	-2.9	-4.7	13.0		152	5.07	8.1
Chile	0.3	Q3	-4.6	2.4	12.8	Dec	11.7	7.9	Nov[§‡‡]	-7.9	-0.3	5.4		-26.0	804	nil
Colombia	7.1	Q3	6.4	7.6	13.1	Dec	10.2	9.5	Nov[§]	-5.7	-5.0	11.9		304	4,544	-12.2
Mexico	4.3	Q3	3.6	2.8	7.8	Dec	7.9	3.0	Nov	-1.0	-2.5	8.6		97.0	18.8	9.9
Peru	1.7	Q3	1.8	2.6	8.5	Dec	7.8	6.2	Dec[§]	-3.4	-1.5	8.1		201	3.90	-1.3
Egypt	4.4	Q3	na	6.6	21.3	Dec	13.9	7.4	Q3[§]	-4.6	-7.4	na		na	29.9	-47.3
Israel	7.5	Q3	1.9	6.1	5.3	Dec	4.5	4.2	Dec	3.4	0.2	3.3		197	3.38	-5.9
Saudi Arabia	3.9	2021	na	8.9	3.3	Dec	2.5	5.8	Q3	13.1	3.4	na		na	3.75	nil
South Africa	4.1	Q3	6.6	2.3	7.5	Dec	7.0	32.9	Q3[§]	-1.5	-5.5	9.7		25.0	17.2	-11.1

Source: Haver Analytics. *% change on previous quarter, annual rate. [†]The Economist Intelligence Unit estimate/forecast. [§]Not seasonally adjusted. [‡]New series. **Year ending June. [††]Latest 3 months. [‡‡]3-month moving average. [§§]5-year yield. [†††]Dollar-denominated bonds.

Markets

In local currency	Index Jan 25th	% change on: one week	Dec 31st 2021
United States S&P 500	4,016.2	2.2	-15.7
United States NAScomp	11,313.4	3.3	-27.7
China Shanghai Comp	3,264.8	1.3	-10.3
China Shenzhen Comp	2,125.8	1.3	-16.0
Japan Nikkei 225	27,395.0	2.3	-4.9
Japan Topix	1,980.7	2.4	-0.6
Britain FTSE 100	7,744.9	-1.1	4.9
Canada S&P TSX	20,599.6	1.1	-2.9
Euro area EURO STOXX 50	4,148.1	-0.6	-3.5
France CAC 40	7,043.9	-0.6	-1.5
Germany DAX*	15,081.6	-0.7	-5.1
Italy FTSE/MIB	25,875.3	-0.7	-5.4
Netherlands AEX	741.3	-1.0	-7.1
Spain IBEX 35	8,957.5	0.3	2.8
Poland WIG	60,530.5	-1.1	-12.6
Russia RTS, $ terms	987.0	-1.9	-38.1
Switzerland SMI	11,404.8	0.3	-11.4
Turkey BIST	5,297.8	-1.6	185.2
Australia All Ord.	7,688.0	1.0	-1.2
Hong Kong Hang Seng	22,044.7	1.7	-5.8
India BSE	60,205.1	-1.4	3.3
Indonesia IDX	6,829.9	0.9	3.8
Malaysia KLSE	1,499.5	0.3	-4.3

	index Jan 25th	% change on: one week	Dec 31st 2021
Pakistan KSE	39,784.9	2.6	-10.8
Singapore STI	3,352.8	1.9	7.3
South Korea KOSPI	2,428.6	2.5	-18.4
Taiwan TWI	14,932.9	nil	-18.0
Thailand SET	1,682.1	-0.2	1.5
Argentina MERV	260,073.6	10.5	211.5
Brazil BVSP	114,270.1	1.8	9.0
Mexico IPC	54,871.4	3.1	3.0
Egypt EGX 30	16,791.1	5.0	41.0
Israel TA-125	1,826.0	-3.3	-11.9
Saudi Arabia Tadawul	10,809.2	1.4	-4.6
South Africa JSE AS	79,725.4	-0.2	8.2
World, dev'd MSCI	2,756.7	1.6	-14.7
Emerging markets MSCI	1,041.3	1.1	-15.5

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2021
Investment grade	146	120
High-yield	470	332

Sources: Refinitiv Datastream; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist commodity-price index 2015=100	Jan 17th	Jan 24th*	% change on month	year
Dollar Index				
All Items	157.7	159.7	3.8	-6.8
Food	139.6	138.0	-1.3	-3.2
Industrials				
All	174.7	180.0	7.7	-9.2
Non-food agriculturals	130.9	132.7	1.7	-20.0
Metals	187.7	194.0	9.1	-6.7
Sterling Index				
All items	196.1	198.0	1.3	2.1
Euro Index				
All items	162.0	162.9	1.6	-3.4
Gold				
$ per oz	1,910.6	1,934.8	6.1	4.7
Brent				
$ per barrel	86.1	86.3	2.7	-2.2

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

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Where have all the workers gone?

Retiring baby-boomers and shorter workweeks explain the labour shortage

FOR MONTHS economists have warned of recession in America, but in one crucial area the economy seems overheated: employers are still struggling to find workers. Why is the labour market so tight?

Companies' hiring plans suggest that the economy remains robust for now. Total labour supply (people who have or are seeking jobs) is roughly back to pre-pandemic levels. By contrast, labour demand (filled plus open jobs) has increased by 3m positions. The excess demand represents about 3% of all those employed, which has contributed to big nominal wage gains. Slower GDP growth—whether a recession or not—will help restore balance.

The supply picture is more complex. During the pandemic, many workers took time off. Immigration, a key source of labour, also fell. Now, however, the labour-force participation (LFP) rate of prime-age workers (aged 25-54) and the foreign-born workforce have almost fully recovered. Neither explains the current squeeze.

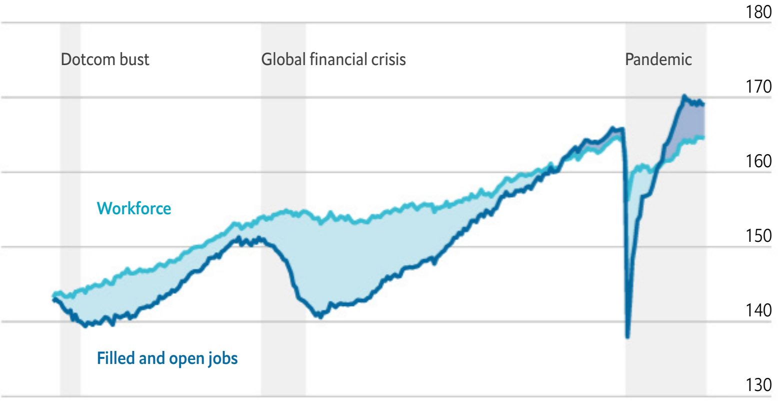
Instead, the biggest shortfall comes from Americans getting older and leaving work behind. Since 2019 those aged at least 65 have gone from less than 16% of the population to nearly 17%. Moreover, unlike prime-age workers, many people who retired early as covid-19 struck have not come back to work. LFP among older Americans, which rose from 12.5% in 2000 to 20.7% in early 2020, has dipped to 19.3%, the same as in 2016. The ageing of the population accounts for the loss of 1.9m workers (0.7% of people aged at least 16), while the overall drop in LFP, mainly among the old, is responsible for a further 0.5m (0.2%).

Some think that a trend among younger people to scale back their working intensity, known as "quiet quitting", may have caused the labour market to tighten. Recent research by scholars at Washington University in St Louis reveals a clear reduction in hours worked by those in jobs. But most quiet quitters are high-earning workers, whereas the biggest labour shortages have been in basic service jobs. That points to another factor: illness. In 2022 an average of 1.6m Americans missed at least one week of work per month to recuperate—whether from covid, flu or something else—up from 1m before covid.

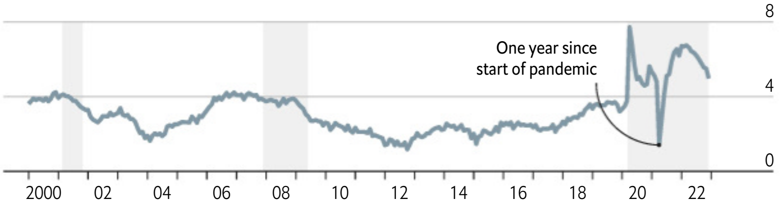
Little by little, Americans will get back to better health. Unfortunately for employers, baby-boomers are unlikely to come out of retirement. ■

→ Demand for labour has outstripped supply since mid-2021

United States, m

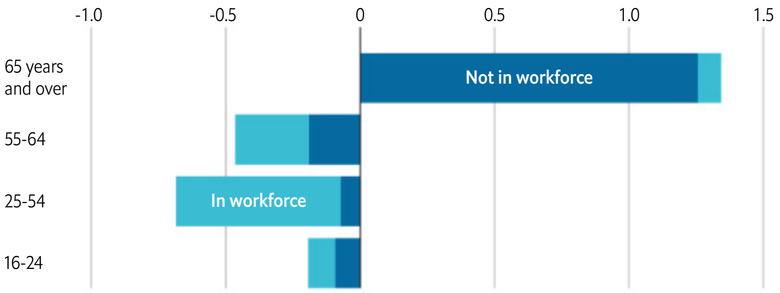


Average private-sector hourly earnings*, % change on a year earlier

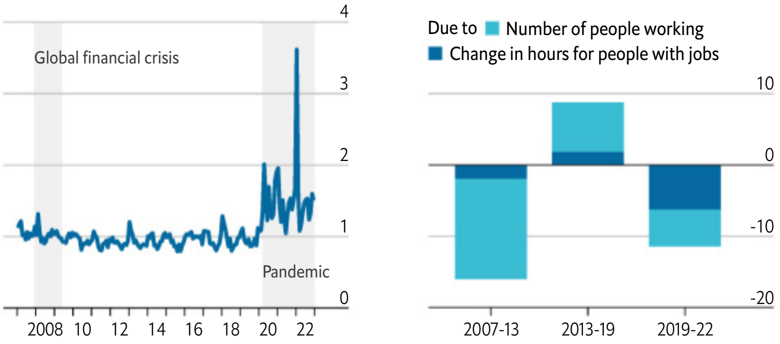


→ Relative to its population, America now has fewer prime-age workers

Change in share of adult† population, % points
From 2019 average to December 2022, United States



→ Workers are putting in fewer hours due to sick days



People on sick leave for at least a week, m
United States, monthly average

Change in annual work hours per person
United States, average per year over period

*Production and nonsupervisory employees †16 years and over Sources: BLS; "Where are the workers? From great resignation to quiet quitting", by D. Lee, J Park and Y.Shin, National Bureau of Economic Research, 2023, working paper

Sacredness in Suffolk

Ronald Blythe, observer, recorder and writer, died on January 14th, aged 100

He had not expected his book to be such a success. It had been acclaimed not only in Britain but also in America, where he had never dreamed of going. All Ronald Blythe had thought about, as he sploshed through the muddy fields of east Suffolk and the ditches running with yellow winter water, was the deep obscurity of the lives of rural labourers. They had dug those ditches and laid those hedges, twisting the reluctant twigs of elder and willow. Now the hedges had grown unruly, despite their efforts. They had ploughed their identity, their "I am", into the flat, clayey fields, and had then gone under that clay. Their names had been carved on headstones, but the Suffolk wind, which cared for no one, had weathered them away. Perhaps he, as a writer, could nonetheless record the voices of country folk still living.

The book he researched and wrote in 1967-68 was called "Akenfield". It was a collection of lightly anonymised monologues gathered from villagers in the area, mainly Charsfield, but going wider. Slowly, he penetrated their "bony quiet" to hear Davie, an ancient, remembering gangs of men singing as they scythed the corn; the blacksmith who could not open a church door without looking at its hinges; the thatcher who announced that hazel, to which he tied his reed bundles, was the best splitting wood there was. The gravedigger told jokes, as gravediggers will, and reminded him that bodies have to be buried facing east, expecting their resurrection—except for parsons, who must face the other way.

Yet comfortable tradition sat cheek-by-jowl with struggle. A young schoolmaster told him how he had come to Suffolk to paint its huge skies, like John Constable, but now found himself teaching a pretty slow lot of pupils. The local magistrate talked matter-of-factly of the incest in the district, which could seem to both parties a completely natural occurrence. A visiting nurse disabused him of cottager kindness by relating how the old were often kept in dark corners, even in cupboards, and how those who could not produce their own food sometimes simply starved. A young shepherd who firmly stated that he "belonged to Suffolk" also thought now and then of Australia, and how good it would be to own something, rather than looking after the flocks of other men.

The modern world was seen with ambivalence. The telly was nice, cars were convenient, but the new commuter families spilling out of Ipswich were judged to be playing at village life. Change was not unwelcome, but happening too fast. To this view, Mr Blythe was gently sympathetic. If he had included a writer in "Akenfield"—besides the poet, lurking near the end of the book, who said he would not have come to live there if he had wanted to get on—it should have been himself.

He had been born near Lavenham, and had stayed in Suffolk all his life. In fact, apart from one stint in Aldeburgh, writing programmes for Benjamin Britten, he had never stirred from the valley of the Stour. His father's family had been farm labourers there, and agriculture was in his blood. He never saw the point of moving, or working at any uncongenial job, if he could make a living as he liked. As a boy he would escape outside if any chores threatened, to explore the lanes on his bike or lie dreaming in the grass, watching clouds. School ended at 14. Gradually, with the encouragement of the artist-and-writer friends he met in his first, shy-librarian job in Colchester, his longing to be a writer grew. Henceforward, he lived for words.

In that vocation he chose to be alone. Solitude, though broken by dear visitors and his imperious cats, was good for writers. Alone, he could train his eye and ear to note the glitter of flint, the "starry, branchy, perfect shape" of common cow parsley, the scrape of the old willow at his window. He spent his last four decades in a very old house that had been left to him by the painter John Nash, Bottengoms Farm, at the end of a mile of unmade track that became, with enough rain, a river. There he was provident, independent and happy. In the raftered rooms he hung pictures, in the garden he planted potatoes and runner beans. The freezer held his harvests, with fussy labels of expiry dates. From ten til one he wrote, in a foolscap book with cheap ballpoints, his books, essays, short stories and, for 25 years, his weekly column for the *Church Times*. Four hundred words for the back page. It pleased him to be read by bishops. After work, and lunch, he wandered. "We tried to get you," the telephone would tell him, plaintively, on his return.

On such perambulations, though, he was seldom truly alone. His mind swarmed with those, both small and great, who had walked East Anglia's fields and lanes before him. He saw Constable, with his painty fingers, opening the door of Stoke-by-Nayland church, where sunlight could turn the tower from pink to gold to gossamer. He watched John Clare, best of all nature poets, skiving on a Sunday, lying in the ling to scribble on his hat. Just as vividly he caught St Cedd, preacher to the East Saxons, standing under a dripping oak, and medieval villagers taking his own paths, speaking Chaucer and getting sexy in Maytime, under the hedges where the speckled flowers gave off their erotic scent.

Chief among his heroes were the three great priest-writers of Anglicanism, George Herbert, Thomas Traherne and Francis Kilvert. They had lived elsewhere, Herbert in the Midlands, Kilvert in mid-Wales, Traherne in Herefordshire. But as a lay reader himself round a cluster of thinly attended little churches, he filled his sermons with these figures and trod in their ways. His head hummed with hymns and chants in which hills danced and trees rejoiced before the Lord. Church festivals marked the rhythms of his days: Passiontide and Easter, Good Shepherd Sunday, Rogation Day tramping the parish boundaries. Like his heroes, he made his local scene sacred. In his writings he celebrated them, Traherne the glorious earth-enjoyer, Herbert continually astonished at the generosity of his Lord. And Kilvert, the intrepid walker, revelling in the light, noting everything and everybody "with a kind of bliss", listening so patiently to the stories of ordinary country folk that they too were transfigured. ■

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